OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

retro GAMER

AMSTRAD | COMMODORE | SEGA | NINTENDO | ATARI | SINCLAIR | NEO GEO | SONY | COIN-OP | MOBILE

RALPH BAER

1922-2014 WE PAY TRIBUTE TO THE FATHER OF VIDEOGAMES

PlayStation™

ALSO INSIDE

COMBAT SCHOOL | AUTOMATA | DIZZY
COMMODORE PLUS 4 | YS | PUYO PUYO
MONTY PYTHON'S FLYING CIRCUS | JEZ SAN

20 GAMES YOU'VE NEVER PLAYED

LAUNCH GAMES

DO THE ORIGINAL RELEASES STILL HOLD UP?

HOW THE PlayStation CHANGED GAMING

△ HUGE 20-YEAR SPECIAL □ INSIDE SONY'S CONSOLE

✕ DEVELOPERS INTERVIEWED

○ THE BIGGEST FRANCHISES



DUNGEONS & DRAGONS
DEVELOPERS EXPLAIN WHY THE DIGITAL GAMES REMAIN SO POPULAR

ETERNAL CHAMPIONS
MICHAEL LATHAM DISCUSSES SEGA'S ATTEMPT TO BEAT STREET FIGHTER II

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DigitalEdition
GreatDigitalMags.com
ISSUE 137

HIGHWAY ENCOUNTER
COSTA PANAYI RETURNS TO HIS INCREDIBLE ISOMETRIC SHOOT-'EM-UP

CREATING PIT-FIGHTER
DISCOVER HOW ATARI GAMES CREATED ITS HIT ARCADE BRAWLER



IT'S FINALLY HERE!
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"Where to start?! It will play pretty much every video game cartridge imaginable (see the full list for details). The graphics up-scaling is unbelievable, you have to see it to believe it. It saves your game progress automatically and you instantly resume from where you left off when you return to that game (you can also save/load at any point you choose too). It looks great and comes with a bluetooth controller, but you can use original NES/SNES/Mega Drive controllers too. I had high expectations for this console and it surpassed them!"
Andy Pearson - General Manager, Funstock.co.uk
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THE RETROBATES

REMEMBERING RALPH BAER



DARRAN JONES

Ralph Baer was a man who was not only full of ideas, but wanted to share them with as many people as possible. The industry has lot a true legend.

Expertise:
Juggling a beautiful wife, two gorgeous girls and an award-winning magazine

Currently playing:
Destiny

Favourite game of all time:
Strider



NICK THORPE

Videogames prior to the Brown Box were like *Tennis For Two* – fun uses for serious machines. I'll always appreciate Ralph Baer as the man who made a computer solely for fun.

Expertise:
Coin-ops, Sega hardware and everything Nineties

Currently playing:
Persona Q: Shadow Of The Labyrinth

Favourite game of all time:
Sonic The Hedgehog



PAUL DRURY

I'm lucky enough to have visited Ralph at his New Hampshire home where he beat me soundly at tennis on a Brown Box. A wonderful man and a legendary figure in the history of videogames. You'll be missed, sir.

Expertise:
Christmases past

Currently playing:
Driveclub

Favourite game of all time:
Sheep In Space



JONATHAN WELLS

A man with whom without we may not be where we are today in the videogames world, a man who wanted little but gave a lot. We need more Ralph Baers.

Expertise:
Tackling dirty nappies and retro spreads

Currently playing:
Destiny

Favourite game of all time:
Day of the Tentacle



DAVID CROOKES

So many of us have taken immense pleasure and opportunity from videogames that it's only right we honour the tremendous person who made it all possible.

Expertise:
Amstrad, Lynx, adventures, *Dizzy* and PlayStation

Currently playing:
Prince Of Persia

Favourite game of all time:
Broken Sword



PAUL DAVIES

Its astonishing that this one man's inspiration has led to such a diverse area of entertainment. The video game *Table Tennis* remains one of the most fun examples of the medium today.

Expertise:
Repeatedly banging my head against a brick wall

Currently playing:
Grand Theft Auto V

Favourite game of all time:
Ghouls 'N' Ghosts



MARTYN CARROLL

Amid all the vapid gaming celebrities are people like Ralph Baer. Creators, pioneers, legends. He will be missed.

Expertise:
Sinclair computers, Spectrum software

Currently playing:
Slender: The Arrival

Favourite game of all time:
Jet Set Willy



JASON KELK

Ralph Baer's creations influenced individuals as well as the industry; Simon was responsible for many people finding a love for gaming.

Expertise:
Indie, homebrew and bedroom-coded games.

Currently playing:
Humanoid (Atari 8-bit)

Favourite game of all time:
Io

LOADING...



Just as we were going to press, news broke that the pioneer Ralph Baer had passed away. Despite his huge contributions to videogames in the early days of our hobby, his name is not well known to most modern gamers. This is a tragedy really, but it's also rather typical of the forward-thinking games industry. Most creators constantly look forward, not backward, and as a result, so do a great many gamers.

So it's been incredibly touching to see the large number of videogame and non-gaming websites that have been telling the world about the passing of this important industry figurehead. I've heard countless tales of Ralph's humility and his refusal to throw himself into the limelight over the years, and it's telling that even in the late stages of his life, Ralph was still creating things.

In an industry that's fuelled by technology it's easy to forget about our gaming past, but to me that's why magazines like **Retro Gamer** remain so important. Ralph may no longer be wish us, but his legacy will remain for countless years to come. So raise your joypad in appreciation the next time you sit down to enjoy your hobby.

Rest in peace Ralph, our thoughts go out to your friends and family.

Enjoy the magazine,



retro GAMER

GAMING ICON

Is Ian Livingstone gaming's greatest icon?

With the new generation now in full swing we felt it was the perfect time to celebrate some of gaming's biggest icons for an exciting upcoming feature.

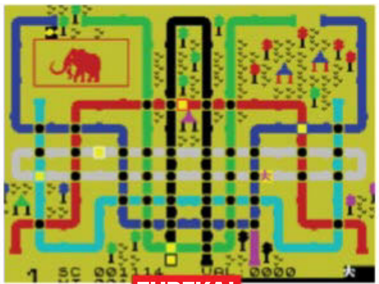
Help **Retro Gamer** find the many important individuals who have turned our favourite pastime into one of the world's biggest forms of entertainment, so that we can give them the recognition they deserve in a future issue. Whether you believe it was Shigeru Miyamoto who refreshed the gaming landscape, or that Nolan Bushnell heralded the start of the industry as we know it, we'd love to have your input. As always the best suggestions will appear in the magazine, so take this chance to join in the celebrations and have your say.

You can tell us about your favourite industry veterans on the **Retro Gamer** forum, our Facebook page, or even via Twitter using **#videogameicons**.

We look forward to your suggestions…



THE FOREST OF DOOM


EUREKA!


BLOODSHOT


DEATHTRAP DUNGEON


BLOOD OF THE ZOMBIES





CONTACT US NOW!

What's your favourite Ian Livingstone game? Let us know

RetroGamerUK

@RetroGamer_Mag

retrogamer@imagine-publishing.co.uk

www.retrogamer.net/forum

> "I thought there was going to be a limit to paper and pencil games and I really wanted to get into the next medium"
>
> Ian Livingstone

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>> Load 137 Breathing new life into classic games



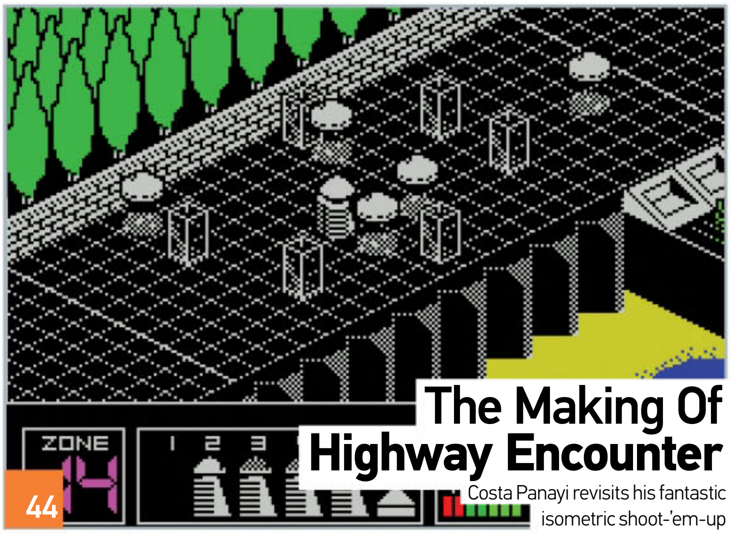


RETRO RADAR

REVIVALS

FEATURED





Don't forget to follow us online for all the latest retro updates

RetroGamerUK | @RetroGamer_Mag | retrogamer@imagine-publishing.co.uk



20 GAMES YOU'VE NEVER PLAYED





> "Its devoted fans have seen unrivaled derision, its games have caused moral panic"

Bluffer's Guide To Dungeons & Dragons

Discover how the classic tabletop game invaded computer screens everywhere



Desert Island Disks: Jez San

We look back at the colourful career of the founder of Argonaut

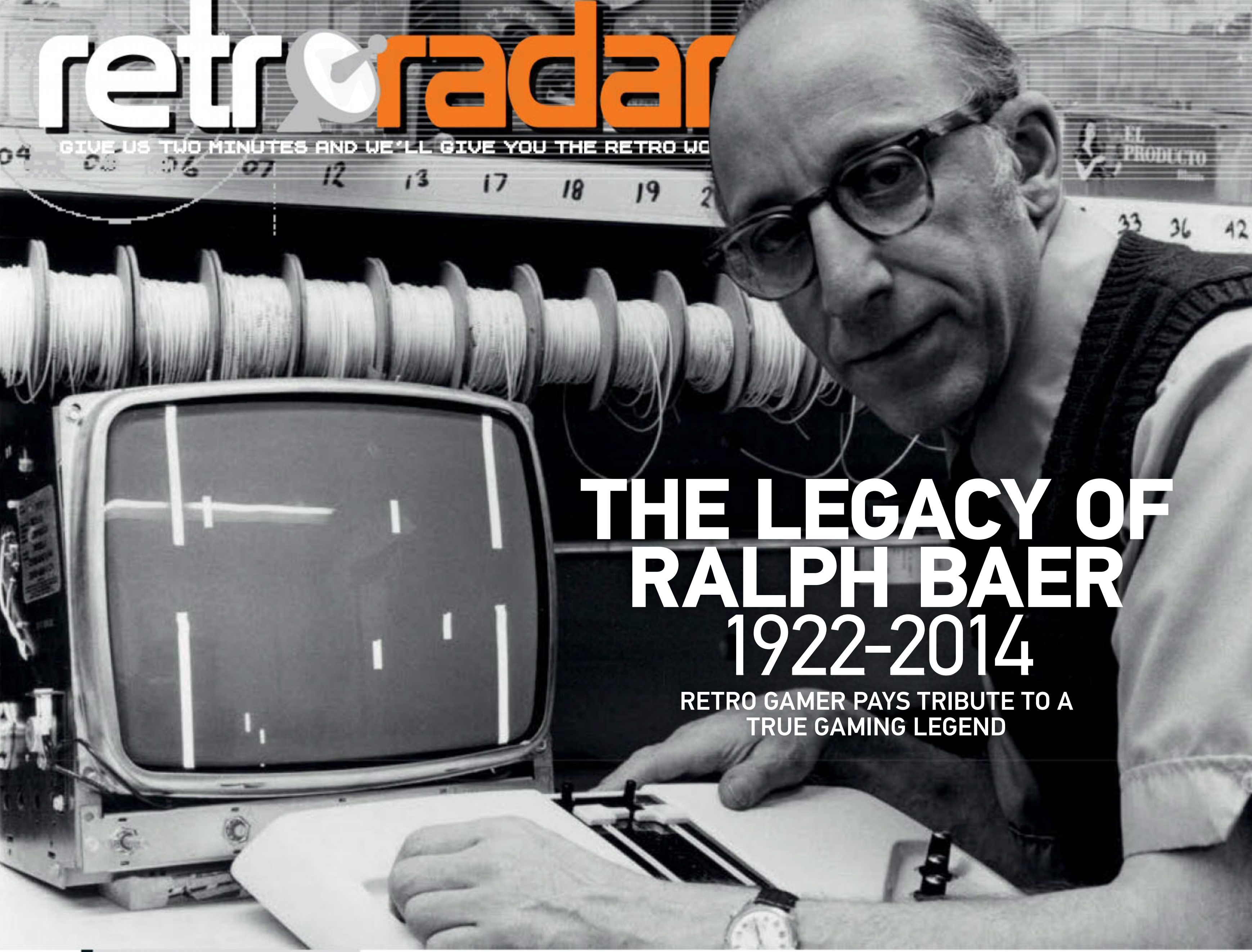


REVIEWS



ESSENTIALS





THE LEGACY OF RALPH BAER 1922-2014

RETRO GAMER PAYS TRIBUTE TO A TRUE GAMING LEGEND

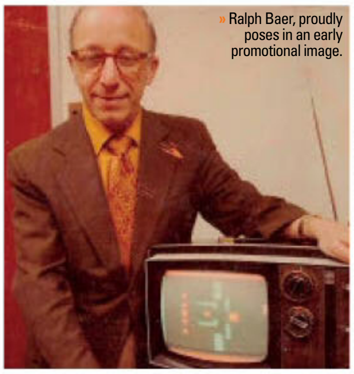
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Ask the average gamer if they've heard of Ralph Baer, and it's likely that they'll give a shrug of their shoulders and return to whatever console they were playing. It's a real shame that one of gaming's most important figureheads is largely forgotten by the gaming community, so it feels like the perfect opportunity to highlight why the contributions of Ralph Baer, who sadly passed away on 6 December 2014, remain so important.

"To people who knew him, Ralph was an extremely personable, generous and brilliant man," recalls Leonard Herman, a videogame curator and friend of Ralph. "He had a youthful enthusiasm which made you forget that you were with someone in his nineties. And he took an interest of the people he was with. He always asked me how my family was doing."

And family was important to Ralph. Born to Jewish parents in 1922, Ralph was born Rudolf Heinrich Baer and lived in Germany. With his parents fearing persecution, he eventually fled with them to New York in 1938, two months prior to the horrific events of Kristallnacht. Baer changed his name to Ralph upon arriving in the United States and eventually found himself drawn to electronics, where he developed a natural affinity for creating things.

In 1943 Baer was drafted into the Army, working for military intelligence during World War II. His skill with electronics proved useful, and Baer would pass the time by turning German mine detectors into radios so that he and his bunkmate could listen to Glenn Miller. Once the war had ended, Ralph continued with his career in electronics and eventually landed a job as senior engineer at Loral Electronics.



Ralph Baer, proudly poses in an early promotional image.

Whilst working on televisions he was struck with the notion of using their dials and knobs to create additional forms of entertainment. Back in issue 100 Ralph told us the following about his first videogame brainwave. "I said 'That's kind of neat, you can fiddle with these controls and things happen on the screen. Couldn't we build something like this into a television set and make it into some kind of game?'" Unfortunately, Baer's boss didn't agree and demanded that he continued to work on the TV, which was behind schedule. Ralph was adamant that a videogame device could have been created as early as the Fifties telling us, "technically, no problem whatsoever. If it would've resulted in a saleable product that did enough for whatever it would cost, well, that's a question I can't answer."





LEONARD REMEMBERS

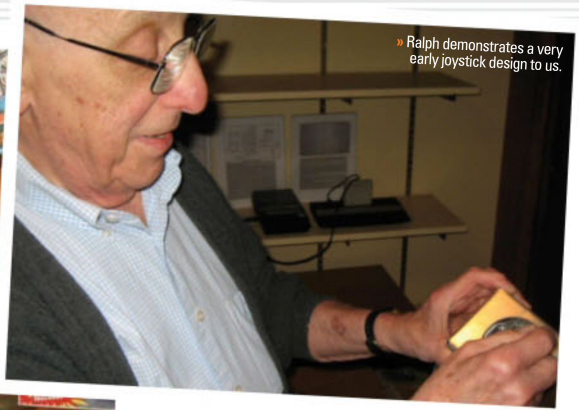
» Seeing Ralph in action

■ There are so many. But the one that comes to my mind happened in 2010 when I was invited by Funspot and given a table at the first PAX East. in Boston. I had my Brown Box replica on display. About ten minutes into the show, the Brown Box just stopped working. Nobody could figure out why. Even the person employed by Funspot to fix their arcade machines couldn't figure out what was wrong with it, let alone fix it. I would like to point out out that replica Brown Boxes only have a single chip inside them, unlike the original which consisted of circuits and wires and resisters and a whole bunch of other things that I can't name because I'm not engineering-inclined.

After [the show], I drove to Ralph's house and had him look at it. He took it down to the place in his house where he was the most comfortable, his basement lab. He fiddled with my Brown box for about fifteen minutes, whistling the entire time. And in the end, he had it working again. It was amazing.



» Ralph with some of his many inventions. Note the Magnavox Odyssey and *Simon* on the top shelf.



» Ralph demonstrates a very early joystick design to us.



» The Brown Box: the daddy of all home consoles.

Ralph continued with his work, but the idea of a device that would allow a TV to play games never left him and he finally had a chance to prove himself in 1966, when, after writing a four-page design document, he secured funding from Sanders Associates, to create what would become known as the Brown Box. Ralph's work on the Brown Box led to the Magnavox Odyssey, gaming's first console. One of its 27 games was *Tennis*, which predated *Pong* by many months. Baer and *Pong*'s owner, Nolan Bushnell went to court and Atari ended up having to license rights from Baer.

"Ralph was the ultimate businessman," explains Leonard about the first of many court cases regarding *Pong* and its many clones that would always fall in Baer's favour. "After Atari became in effect a licensee of Magnavox and Sanders, Ralph viewed Atari as a client. And in his mind, you should never cause friction with your client. As Nolan got the glory for inventing videogames, Ralph merely stayed on the sideline and let his client, his customer, do as he pleased. Years later, Ralph resented the notoriety that Nolan received while he himself received very little. Ralph readily acknowledged what Nolan did for the industry but he wanted to be known for what he had actually done. After Ralph received the National Medal Of Technology from President Bush in 2006, he was finally satisfied that he was receiving the credit that he felt he deserved."

Baer does deserve credit for his achievements and contributions to gaming. He created a number of firsts that the industry is currently built on and created numerous other gaming devices, including *Simon* and *Super Simon*, which are still entertaining children nearly 40 years after its original conception. It's hard to imagine what our hobby would be like without his input, and even harder to imagine where we might be if his original ideas have been conceived in the Fifties. "Ralph was the consummate engineer and it is fitting that the roots of the industry began in engineering and not marketing," concludes Leonard. "He didn't stop with the Brown Box. He created the first light gun. He saw a problem with the arcade game *Touch Me*: the game was missing an audio tone. When he added that and created *Simon*, he created one of the best-selling games of all time."

So the next time you boot up your PlayStation 4, Xbox One or Wii U, take a few moments to think of Ralph Baer, for without his bold, brilliant ideas your gaming experience might be very, very different. Rest in peace Ralph Baer.

MY MEMORIES OF RALPH

» Paul Drury recalls meeting the legendary creator

■ They say you should never meet your heroes but then most people's heroes aren't ninety-year-old men with impeccable taste in cardigans. I remember Ralph first welcoming me into his New Hampshire home back in 2009, me feeling slightly awkward carrying his book *Videogames: In the Beginning* and an original *Simon* handheld for him to sign. He was all smiles and full of questions about the UK (he'd been stationed over here during the war) and our magazine. He enthusiastically took me down to the basement, where he showed me the workbench where so many of his inventions had begun, talked about the eureka moment in 1966 when he realised playing games on a TV would one day be huge and then soundly beat me at *Tennis* on a Brown Box, the prototype that what would evolve into the Magnavox Odyssey.

We kept in touch, did several interviews and when I visited again in 2012, I was incredibly touched to see issue 100 of **Retro Gamer** proudly displayed on his coffee table. He was a pioneer, a visionary and a real gentleman. RIP Ralph and thank you for first pressing 'Start' all those years ago.



» Paul visiting Ralph in New Hampshire, USA, in 2009, with Odyssey screen overlays in the background.

All new images © Paul Drury

retro radar

news wall



» *Thimbleweed Park's* interface emulates the look of games developed in LucasArts' SCUMM engine, such as *The Secret Of Monkey Island* and *Day Of The Tentacle.*



» Gary Winnick



» Ron Gilbert

ANOTHER CLASSIC RETURNS

Just as we went going to press, it was announced that *Day Of The Tentacle: Special Edition* is to be released later this year. Tim Schafer revealed that Double Fine is working on the game and it will be released on PlayStation 4, PS Vita, Mac, PC and Linux. It's unclear if you'll be able to switch between classic and new versions like the *Monkey Island* special editions. More news as we get it.

THE RETURN OF POINT-AND-CLICK?

RON GILBERT AND GARY WINNICK DISCUSS THEIR CLASSIC NEW ADVENTURE GAME

Imagine rooting through some of your old stuff and inexplicably coming across on old LucasArts point-and-click adventure game that you have never played before. That's the pitch for *Thimbleweed Park*, the spiritual successor to the classic *Maniac Mansion* that's been successfully kickstarted by LucasArts alumni Ron Gilbert and Gary Winnick. We clicked 'Talk to' and then clicked on Ron and Gary to find out more about the game…

What's it like to be working together again after all this time?
Gary Winnick: It's almost like no time has passed, I feel the same chemistry. It's the most fun I've had working on a creative collaboration in years.

Are you planning to add any new gameplay mechanics to *Thimbleweed Park*, or will it be a classic old school adventure?
Ron Gilbert: For the most part, it will be classic point-and-click adventure. We have both learned a lot about good adventure game design over the years and all of those lessons will be used in *Thimbleweed Park*, but we still want it to feel like a classic game, maybe just without the worst parts.

What can you currently tell us about *Thimbleweed Park*?
GW: On the story side, the way *Maniac Mansion*'s a parody of the B-horror genre, *Thimbleweed Park* does the same for *Twin Peaks*, *The X-Files* and *True Detective*, with a dash of Stephen King. We



» One of the images, Ron and Gary used to pitch their KickStarter. Who wouldn't want to discover a classic?



» The set up for *Thimbleweed Park* is that two washed up detectives have been called in to investigate a murder.

obviously want it to look and feel like a game from the same era as *Maniac Mansion*.

The two detectives look a little like Mulder and Scully. Is this intentional?
GW: Actually, that wasn't originally intended - maybe it was subconscious, we realised it after we had them drawn and up in a test environment. But I certainly see and don't mind the comparison.
Ron: They might look a little like Mulder and Scully, but their characters are very, very different. I think that's why we didn't draw that comparison initially.

Why do you think there's so much current interest in classic adventures and RPGs?
GW: I think nostalgia is a pretty powerful feeling, people want to re-live enjoyable experiences they had growing up. In our case most of the folks who played *Maniac Mansion* are all grown up and remember the game very fondly.
RG: They were also really good games. Back then, we didn't have fancy graphics to fall back on. The game has to be fun or else.

Why choose a classic pixel look?
GW: Ron and I really reconnected with the feeling of what it was that made those games special to us. One of the things (aside from the technical limitations) is we still found them really charming, it was like playing a game with colorful animated icons where a player could pretty much instantly recognise what an object was. The simple iconic look let them



» *Thimbleweed Park* creators Ron Gilbert and Gary Winnick first worked together as co-designers on *Manic Mansion.*

use their own imaginations to fill in all the other details of the characters and their world.

Do you feel much pressure considering your background in the genre?
GW: I actually don't feel a lot of external pressure. That being said, both Ron and I are our own strongest critics, so w e need to make sure we please ourselves. If we can manage to do that, I think we'll have a game we can be proud of.
RG: We've tried to clearly lay out our vision for the game. I think backers will know what they are or aren't getting. That said, we will probably make a lot of 'adjustments' over the course of the project. You always do. But as Gary said, most of the pressure is going to coming from ourselves.

Will there be any nods to past LucasFilms games?
GW: Absolutely!
RG: We will most probably get sued, but that is what makes it so fun.

THINGS WE'RE LOOKING FORWARD TO

BACK IN TIME 2015

The classic videogame music event will be heading to Brighton 20 June 2015. Head to www.bitbrighton.com for more information.

retro radar

column



Here's my bio… Paul Davies

In 1992 I started out on *Mean Machines Sega* and *Nintendo Magazine System*. In 1995 I became editor of *C&VG*. I led the *C&VG* website from 1998 until Christmas 2000, then I left journalism to be concept design manager at Criterion Games. I returned to journalism in 2002 and from 2005 I've been running my own company, Unlikely Hero.



PlayStation: coming ready or not

Every retail-register 'kerching' for Sony's original PlayStation was a bell that tolled for the death of an old and dear gaming industry. You think I'm being overdramatic, right?

It was a CD-ROM console, the same as the SEGA Saturn, but that wasn't the whole story which is why Sony's console ran amok. Prior to December 1994 I had a very clear idea of what games were about, and how to talk/write about them. There were genres, points of origin, prestige developers and publishers, and an easily identifiable audience. It all made sense. We all had fun. Rinse and repeat.

For a while PlayStation was a Namco arcade port machine to rival SEGA's own greatest hits platform. PlayStation had *Tekken*, *Ridge Racer* and *Time Crisis*. Saturn got *Virtua Fighter*, *Daytona* and *Virtua Cop*. I was fiercely pro-SEGA, but it was obvious that the foundations of gaming were shaking, cracks were starting to form.

When PlayStation launched in the UK a year later, the line-up was a perfect snapshot of where Sony was taking PlayStation versus SEGA and Nintendo, the old guard. *WipEout* and *Destruction Derby*, both home-grown in the UK, were perfect for the domestic audience. PlayStation became ours. The sense of exotic that accompanied hit titles from Japan became an irrelevance. This was "think global, act local" for want of a better slogan. It was somehow unsettling.

Wearing my SEGA goggles and Nintendo socks I clung dearly to what I knew. I could point to superior conversions of Capcom fighters on Saturn, and marvel at the majesty of *Super Mario 64*. Meanwhile it was almost as if Sony was mocking the likes of me with an overflowing line-up of mediocre titles that I appreciated Nintendo's then President Horishi Yamauchi lambasting. He made a big deal out of this at Shoshinkai in December 1995, pointing to blockbusters such as *Final Fantasy* on Nintendo while retailers – he suggested – were struggling to manage space for too many PlayStation titles. I was puzzled to hear one very prominent developer angrily proclaim that he wouldn't be supporting the new Nintendo console, N64, because it was cartridge based. What on earth was he thinking?

I came to my senses when Squaresoft, announced *Final Fantasy VII* as a PlayStation exclusive. We received sheets of concept artwork and screenshots at our editorial office, sketches by Tetsuya Nomura and stills from the incredible cut scenes. I was smitten.

I tried, and failed, to rally against *Crash Bandicoot*. I met Naughty Dog founders Jason Rubin and Andy Gavin who were particularly bright and polite. *Tomb Raider* made its debut on Saturn, but *Lara Croft* became the PlayStation cover star for *Face* magazine, at the time the coolest style publication in the UK. This was a runaway train.

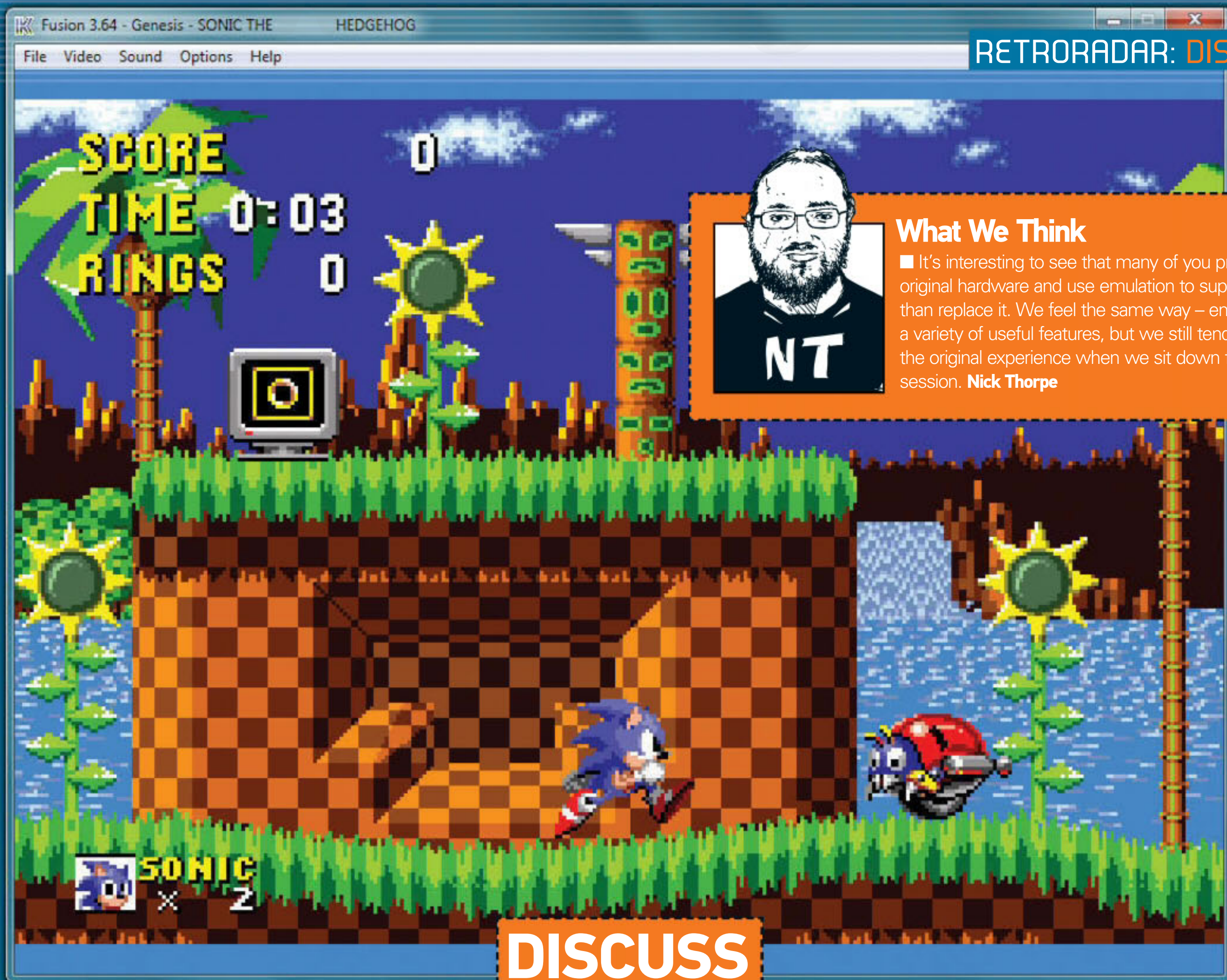
While the gaming press pushed *Soul Edge* and *Ridge Racer Revolution* with a side order of *Parappa The Rapper*, the mainstream took the latter as the main course. PlayStation took up residence in all walks of life, moved from bedrooms to front-rooms. It gained – by hook or by crook – the kind of social standing that I'd always wanted for games.

Sony stamped on my soul and broke my heart but my god that console was a phenomenon. *

What do you think?

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK | @RetroGamer_Mag | retrogamer@imagine-publishing.co.uk | www.retrogamer.net/forum



What We Think

■ It's interesting to see that many of you prefer the original hardware and use emulation to support it rather than replace it. We feel the same way – emulators have a variety of useful features, but we still tend to prefer the original experience when we sit down for a gaming session. **Nick Thorpe**

DISCUSS

Do you prefer using emulators or original hardware?

Forum
www.retrogamer.net/forum

■ Used to play the real thing, but now space and my games room have been taken over by a small child it's emulation all the way. Wish I'd done it earlier. I have a desktop PC and an Xbox 360 control pad and can play most games for most systems in one place. **ianpmarks**

■ Sure, for space, money and practicality reasons. But for all the systems I've ever owned I stick to the real thing, with a bit of "modern help" (like 1541 Ultimate for the C64). **Hiro**

■ I go as far as MAME for arcade games that haven't got home conversions but otherwise it has to be the original hardware. Legitimate digital re-releases have made it easier to play games without all the original hardware but there is so much more that needs to be made available again. **Megamixer**

■ I emulate for 8-bit development as it's far quicker to make small changes and re-test them, and on a real machine it's all too easy to crash it. **joefish**

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■ I emulate to preserve my original hardware. It helps avoid wear and tear on my cartridge contacts etc. **@Vetroidmania**

■ Only MAME. I much prefer the feel of getting the original hardware out! Shame some machines are so expensive to buy though… **@Mookmac**

■ I emulate as it's easier and cheaper to record and I'd like to keep my consoles/carts/discs in a good condition for longer. **@SolipsismCrisis**

■ Yes, because it's great! Near perfect emulation is possible on most systems. **@Runadumb**

■ Only use MAME to emulate. Lucky enough to own old systems and patient enough to wait to add more retro games to my collection. **@darthsteve333**

■ I emulate to save wear and tear on my original systems and cassettes. I have thousands of games via emulation! **@JamesByersMusic**

Facebook
facebook.com/RetroGamerUK

■ Emulation is great to play stuff you otherwise wouldn't be able to. I've got MAME running perfect on my HD TV so I can't moan can I? Computer or console wise though; nothing beats the real thing. **Stevie Aaron**

■ The real thing is best, but the hardware is getting fragile and rare. So I emulate most of the time and get out the real thing to show it off or if I need a real fix. **Peter Hurst**

■ There's no substitute for the real thing. However, today it seems very difficult to continue with this hobby when a lot of older games are going for a ridiculous amount of money. And when you factor in storage as well, emulation seems a lot more appealing. **Jim Lamming**

■ You can't beat a full retro set-up. It's not just about the games, it's about the nostalgia and excitement you have when you get that loading screen and wait with baited breath to see if it loads or crashes. **Stephen Prior**

the vault

THE COOL RETRO STUFF THAT WE'VE HAD OUR EYE ON THIS MONTH

Push > Start: The Art Of Videogames

There are a number of books currently available that focus on the art of videogames, but this is easily our favourite. This immense tome may be short on editorial, but its images tell you everything you need to know. The artwork is sensibly divided into six chapters: early games, arcades, 8-bit, 16-bit, 3D and HD and cover a total of 215 different games. There's a small intro setting up each section, but otherwise the focus is fully on the imagery, and in many cases it's absolutely superb, with only the later HD images featuring a slight drop in image quality.

Price: £29.99 **From:** www.funstock.co.uk

Every Day Is Play

Unlike the other books here, *Every Day Is Play* immediately stands apart as it celebrates the culture of games, as well as the games themselves. Virtually every aspect of gaming, from cool apparel to important developers and community sites is covered, giving an incredible insight into what gaming means to so many people today. Add in some incredible artwork from a number of popular artists, and *Every Day Is Play* becomes an essential read that no coffee table should be without.

Price: £35 **From:** www.gamepaused.net

The Unofficial Game & Watch Collector's Guide

If you've ever played any of Nintendo's classic LCD games then you'll want to check out this informative book. While the history section feels far too brief, the sheer amount of information about Nintendo's large range of LCD-based games more than makes up for it. Everything from *Ball* to *Erasers And Dioramas* are covered and it's all backed up by impressive imagery.

Price: €59.95
From: www.gameandwatch.at

PICK OF THE MONTH



The 100 Greatest Console Videogames 1977-1987

All lists have missing favourites and this latest compendium from Schiffer is no different. It's American focus means the poor old Master System barely gets a look-in, while systems like the Atari 2600 coverage receive a little too much coverage. Despite the bias, this is an entertaining read with good insight into the chosen games and some lovely artwork.

Price: £28.99
From: www.amazon.co.uk

The History Of Ocean Software

While the history part of this book feels lightweight, the real gold comes from the sheer number of people that Chris Wilkins and Roger Keen have interviewed. In addition to founders Jon Woods and Dave Ward, the book has interviews with Gary Bracey and 34 Ocean members of staff. It's finished off with tributes to Jonathan Smith and Allan Shortt.

Price: £25 **From:** www.fusionretrobooks.com



TRASHMAN (ZX SPECTRUM)

"After I got my Spectrum for my 14th birthday I went out and bought two games. This was the first one and I still love it now. I even have original receipt with the date of my birthday on it!"

PAID: £5.95

DEUS EX MACHINA (ZX SPECTRUM)

"I remember seeing the great reviews for it and the amazing-looking screenshot of the baby. I've played it through a few times and it definitely has to be played with the audio cassette. My copy is signed by Mel Croucher, who's a thoroughly nice chap."

PAID: £11

JEWEL IN THE CROWN

THAT PIECE YOU CAN'T BE WITHOUT

BOXED RUBBER-KEY ZX SPECTRUM

■ ""I remember by 1984 more and more of my friends were getting a Spectrum. I badgered my parents and they said they couldn't afford it. Then one day before my 14th birthday I came home from school and there in the living room was a brand new Speccy – I went mad! I had my own computer! It still looks class, 30-odd years after it was launched, although this isn't my original – I traded that one in for a Spectrum+."

3D MONSTER MAZE (ZX81)

"I didn't have a ZX81 but my cousin, Hayden, did. It was one of the things we did that didn't involve trying to get into fights at Weston Favell Shopping Centre and we played a lot of this classic."

PAID: £7

MAZOGS (ZX81)

"Another game I played with my cousin. I remember he turned the TV off once after his go and I panicked thinking him turning it off would make the game go away. Fortunately he turned the telly back on and I was relieved to see the game still there!"

PAID: £5

CONKER'S BAD FUR DAY (N64)

"I knew that Rare had something to do with one of my favourite Spectrum companies, but never played it back in the day. But I wanted it to complete my collection of Ultimate/Rare games and I've seen the price of this double since I purchased my copy."

PAID: £33

Collectors corner

Readers take us through the retro keyhole



BIO

NAME: Mark R. Jones

ESTIMATED VALUE: £10,000

MOST EVER SPENT: £33 for Conker's Bad Fur Day

FAVOURITE CONSOLE: ZX Spectrum

FAVOURITE GAME: Boulderdash (ZX Spectrum)

I started collecting around 1991 when I worked in a computer shop," says Mark, former graphic artist for the famous Manchester software house Ocean. "People were exchanging their 8-bit machines for Atari STs and Amigas and brought in their whole collections. I had the pick of the ZX Spectrum stuff that came in." Mark appears to be one of the earliest retro collectors, buying Spectrum games when everybody else was jettisoning theirs. But what attracted him to the Sinclair computer in the first place? "You tend be fondest of the era you grew up with and the first computer is always the most magical," he explains. "And it's also your age, when you're a teenager you're very impressionable so to have a brand new Spectrum for my 14th birthday was bound to leave a mark."

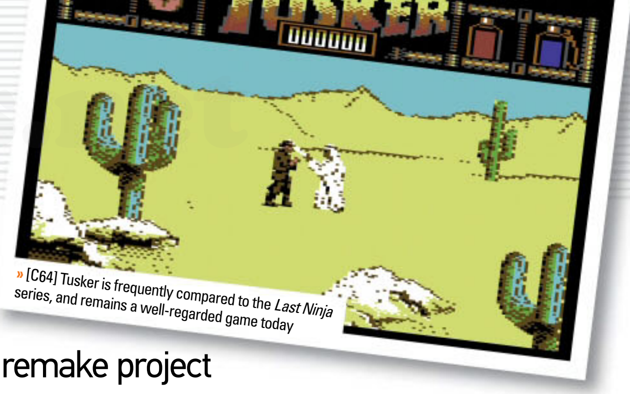
Collecting took a back seat in the mid-Nineties before Mark rediscovered his old hoard of games in his attic around four years ago. Since then he has been enjoying acquiring all the games from his preferred software companies of the Eighties. When in his mid-twenties, Mark fell in love again, this time with the Nintendo 64, and he has a full set of Rare games for the console.

On the subject of complete sets, we enquire whether Mark would ever consider trying to obtain a full set of Spectrum Games. A tall order, for sure? "I can't actually say the size of my collection now, but I know there are some collectors who have more than me. But a full set? Anyone who even tries [that] needs admitting to their local secure unit. It would be an impossible task!" To us that sounds like a challenge has been laid down.

But to Mark, like many collectors, the act of protecting gaming history is as important as the collecting aspect itself. "These things deserve preserving before they crumble away. I mean how long is a Spectrum tape going to load for? 30 years on, and the looked-after ones still load without a problem generally. But are they going to last another 30? I somehow doubt it." ✱



a moment with...





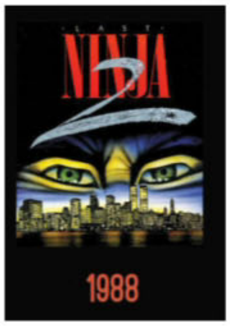
» [C64] Tusker is frequently compared to the *Last Ninja* series, and remains a well-regarded game today

Matt Gray

The acclaimed C64 musician discusses his Reformation remake project



» [C64] The methodical pace of *Driller* demanded suitably atmospheric and menacing tunes, which Matt delivered.



» An updated version of the classic *Last Ninja 2* cover art adorns Matt's remix album.



Why did you decide to revisit your C64 tracks?
It was an idea that took over 18 months to fully think through and find a window to do it in. There seemed to be so many C64 fans still interested in hearing remixes of older games tracks, I thought it would be a bit different if the original composer did the remixing (or remaking as I prefer). I wanted to make them sound as I would have liked given the technology back then.

Why did you choose Kickstarter?
It's the perfect vehicle for this sort of project. It's a way of people being able to get what they want to hear or see made viable. To have just gone and spent time and money on such a large project without knowing the market would have been foolhardy. This way I know who wants the music and I can get instant feedback during the planning and production.

Have you been surprised by the popularity of your Kickstarter?
I was surprised it was funded in the first day, yes. That was amazing. But the numbers are working out pretty much as I suspected they might. But it's not over yet, so things may go to another level.

Why do you think there's so much love for C64-based music?
Partly because it was quite a unique sound. It had by far the best sound chip as far as I was concerned. But also it was a very special time of emerging technology. Playing videogames at home was still very new and things were evolving all the time. If you were a teenager into computers and gaming back then you were in a bit of a minority group, especially compared to the global craze gaming is now.



» [C64] Matt's audio was a key part of making *Bangkok Knights* such an impressive C64 release.

How long did it take you to remix *Last Ninja 2*?
The Central Park Loader remake took me about two weeks, on and off. I had big breaks in between, but it came together quite quickly. The finishing touches took the time.

What has it been like returning to your old tunes?
A bit daunting when they are as revered as something like Central Park *LN2*, and a little bit daunting for other reasons when I tackle, say *Stormlord 2: Deliverance* because there was a track that I'd never heard people particularly comment about. I had to enhance that even more than, say, Central Park. But the end result has been a great critical response which I'm chuffed with.



» [C64] *Dominator's* upbeat loading music set the tone well for the game's relentless blasting.

How hard is it to come up with suitable pledge offers?
It's a tricky balancing act. It's very easy to get convoluted planning rewards on Kickstarter. Especially if you're involving limited offers. I think the balance was okay in the end [for *Reformation*] though.

What's your favourite personal C64 composition and why?
Of mine? It has to be Central Park In-Game, because I think the intro alone has become fairly symbolic to *Last Ninja 2*. It's instantly recognisable and lots of people love it. That's all a composer can wish for as a reaction in their listener. ✱

BACK TO THE NINETIES

» [PC] *Quake 2* arrives and is bigger, better and prettier (in a grimy sci-fi/military sort of way) than ever before.



» [Arcade] If you loathe the stench of fish, getting damp and moist and the general faffery of rods and hooks, you'll love *Sega Bass Fishing*.



THE LATEST NEWS FROM DECEMBER 1997

DECEMBER 1997 – Gran Turismo powers in, Mega Man gets an extra dimension, Quake 2 arrives, Bomberman goes three dimensional, Pokémon TV hospitalises kids while Sega gets wet and fishy. Richard Burton gets his rod out…



The racing game genre was about to receive an injection of power with the release of *Gran Turismo* on the PlayStation, the game was initially released in Japan with European and US versions following five months later. It featured two distinct gaming modes (Arcade and Gran Turismo), 11 circuits to race on and boasted an impressive roster of 140 cars. Great music, graphics and gameplay impressed the gaming press and the game was received with widespread acclaim. The success of *Gran Turismo* sparked an ongoing series of games and went on to become the biggest selling videogame on the PlayStation notching up 10.8 million units worldwide.

Another PlayStation title which received an early Japanese release before the rest of the world was *Mega Man Legends*. Developed and published by Capcom, the game saw a departure from the usual 2D platforming gameplay of the *Mega Man* titles with a foray into three dimensions and an emphasis more on adventure and RPG gameplay in contrast to the usual side-scrolling platforming action.

Quake 2 finally arrived on PC and Mac in early December after months of extensive playtesting and critiquing on the internet. The story of *Quake 2* consisted of you playing as a marine taking part in Operation Alien Overlord, a counter-strike attack against an alien invasion on earth. All of your fellow marines are wiped out in the initial attack leaving you to go on alone and attempt to kill the alien leader and thus, save the world.

There were several enhancements to *Quake 2* over the original. The single player game featured mission-based goals interspersed with CGI cut scenes and the levels themselves were much larger and detailed than the original, with the addition of being able to move both back and forth between each level. There were also changes to the weaponry on offer too – gone were the Nail Guns and Thunderbolt (boo) but newly available were the Chain Gun and Hyperblaster (yay).

Quake II became a massive hit for id Software, pulling in impressive sales

THIS MONTH IN…

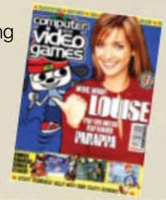
CU AMIGA

The then biggest selling PC CD-ROM game of all time, the graphics puzzle adventure *Myst* by Cyan, was about to be released on the Amiga a mere four years after the PC version hit disk drives. People were decidedly excited at the prospect; *Myst* looked great, sounded great yet played not great at all.



COMPUTER & VIDEOGAMES

C&VG featured a fawning session with pop star Louise Redknapp while enticing her to play Parappa The Rapper. Lowlights included talking about driving, food and blagging concert tickets. Some gaming was mentioned with Louise being apparently red hot at *Virtua Fighter.*



OFFICIAL SEGA SATURN MAGAZINE

Stuck to the cover of *OSSM* this month was one of the best mag giveaways ever. The two-stage demo of *Christmas NiGHTS Into Dreams* played beautifully with season-changing detail depending on the time of year and was absolutely stuffed full of unlockable content.





CHARTS

DECEMBER WORLD NEWS

1 December saw Konnie Huq present her first episode of the long running children's television show *Blue Peter*. She would eventually become the longest serving female presenter on the show leaving in January 2008.

18 December saw Chris Farley, American comedian, actor and regular on the *Saturday Night Live* comedy sketch show die at the age of 33 of a cocaine and morphine overdose.

25 December saw the death of American actor Denver Pyle. While the name may not be instantly recognisable, his most well known television character certainly is. Pyle portrayed the bearded Uncle Jesse in the *Dukes Of Hazard* from 1979 until 1985.

26 December saw the general release of The Spice Girls' movie *Spice World*. Despite its cringeworthiness it initially did well at the box office and featured some larger than life cameos from Meat Loaf, Stephen Fry, Richard E. Grant, Elton John and Roger Moore.

In a quiet month for music releases, these albums were released; *MTV Unplugged* (Bryan Adams), *Blindside* (Blindside), *Sounds Of Decay* (Katatonia), *Riverfenix* (Riverfenix) and the *Slim Shady EP* (Eminem). The UK Christmas number one single was Too Much by the Spice Girls, the second of what would be three consecutive Christmas number ones.

December also featured some big movie releases. 12 December saw the latest James Bond movie *Tomorrow Never Dies* starring Pierce Brosnan as 007. James Cameron's blockbuster disaster movie *Titanic* hit US cinemas on the 14 December and Quentin Tarantino's latest offering, *Jackie Brown*, premiered on Christmas Day.

of over one million units. Not surprising considering the excellent gameplay, improved graphics and perfectly pitched difficulty levels.

Nintendo 64 and PlayStation versions of *Quake II* were also on the cards but you would have to wait almost two years before you saw those beauties in stores. Sega Saturn owners were mildly happy after finally getting the original *Quake* released for their console this month. However, don't hold your breath for *Quake 2*, Saturnites…

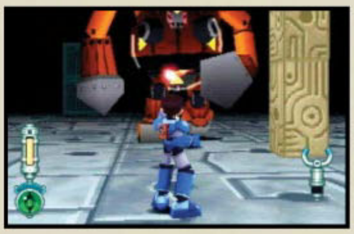
Although they still required some final work and tinkering to get them completed, there were no less than three snow-based sports games due for imminent European release and the early Christmas previews looked promising for the frosty trio. First up was *Nagano Winter Olympics '98*, a stylish looking 12 event button-mashing, forearm-busting marathon including Luge, Curling and Ski-Jumping in the style of *Track & Field* for the N64 and PlayStation. *Steep Slope Sliders, was* a fairly generic snowboarding title for the Sega Saturn. Finally, *Cool Boarders 2* for the PlayStation was a much enhanced sequel with many nice touches including customisable characters, snowboards and an excellent replay facility utilising a variety of different camera angles.

» [Sega Saturn] Good news, *Bomberman* gets an extra dimension. Bad news, he has to stay in Japan.



Released this month on the Sega Saturn by Hudson Soft was *Saturn Bomberman Fight!* In a change from the norm, this *Bomberman* game utilised isometric landscapes rather than the more familiar 2D map allowing for hills and valleys in the terrain to be exploited. The addition of a survival and battle modes was also welcome, however, the number of participants allowed in multiplayer mode was lowered to four. Despite a colourful, fast paced and oddly playable excursion for the *Bomberman* series, backed up with above averages sales, *Saturn Bomberman Fight!* never got the go-ahead to venture outside of Japan.

» [PlayStation] Mega Man goes from 2D side-scrolling platform game to third-person action adventure.

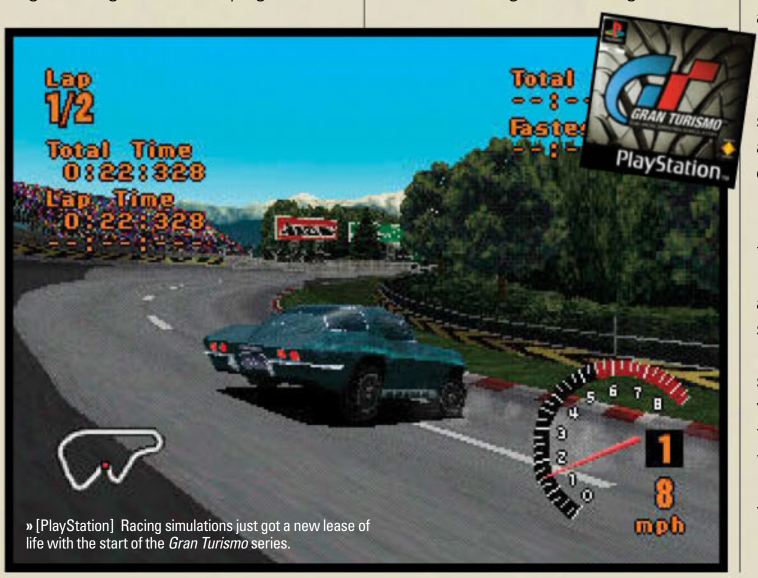


Arcade gamers were in for a slower paced coin-op release this month with Sega's *Bass Fishing*. Set across four stages the game had you cast your line and attempt to lure in fish with the aim of catching a pre-defined weight of fish before your time runs out.

While *Sega Bass Fishing* sounds tiresome and dull, the reality was much different. It was enthralling with added competitiveness available with a simultaneous four player option. It also proved to be a critical and commercial success and as such was ported to a variety of console platforms including the magnificent Dreamcast version as well as PC, Wii and Xbox 360.

16 December saw the usually friendly *Pokémon* character Pikachu put 685 Japanese children in hospital. During a transmission of the popular *Pokémon* animated television series, an action scene involving Pikachu using his Thunderbolt attack to stop an incoming salvo of missiles used a series of fast red and blue strobe flashes to animate the explosion. This caused several hundred viewers to suffer from photosensitive epileptic seizures, headaches, nausea, convulsions and even temporary blindness which all required hospital treatment.

The episode has not been shown on television anywhere in the world since with its after effects given the rather unflattering title of Pokémon Shock. While 685 children were hospitalised, reportedly several thousand others felt a variety of symptoms. The experience was probably not the Christmas present kids wanted from Nintendo… *



» [PlayStation] Racing simulations just got a new lease of life with the start of the *Gran Turismo* series.

DECEMBER 1997

SEGA SATURN



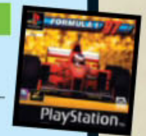
1 Sega Worldwide Soccer '98 (Sega)
2 Last Bronx (Sega)
3 Resident Evil (Capcom)
4 WipEout 2097 (Psygnosis)
5 Madden NFL '98 (Electronic Arts)

PC



1 Command And Conquer: Red Alert – The Aftermath (Virgin Games)
2 Quake: Replay (GT)
3 Total Annihilation (GT)
4 Flight Sim '98 (MicroProse)
5 Hexen 2 (Activision)

PLAYSTATION



1 Formula 1 '97 (Psygnosis)
2 Nuclear Strike (Electronic Arts)
3 Abe's Odyssee: Oddworld (GT)
4 Track & Field Platinum (Konami)
5 Parappa The Rapper (Sony)

MUSIC



1 Teletubbies Say Eh-Oh! (Teletubbies)
2 Perfect Day (Various Artists)
3 Too Much (Spice Girls)
4 Barbie Girl (Aqua)
5 Never Ever (All Saints)



Drain Mania

"WOW, YOU MEAN THERE WERE DINOSAURS HERE IN BROOKLYN?"

#82

» ICON SOFTWARE » BBC MICRO » 1985

A hapless surface dweller seeks to escape from a dim network of drains, struggling to evade a number of monstrous nasties, as well as fireballs and gloops of water. Along the way, he manages to accumulate a small fortune of mysteriously numerous gold coins, which we can only assume have been carelessly flushed away by the denizens of a filthy-rich world above.

To dispense with the monsters, our hero, Theodore, has to floor them by headbutting the floor beneath them and then kicking them away, while if he gets into bother, there's always the zap button which he can press to clear the screen of enemies (only three times, mind) or an invisibility button which, again, has a limited lifespan. And did we mention that he runs around on a bright blue floor, and that the nasties come from green pipes?

Yep, it's a *Mario Brothers* clone for the Beeb, but it's a good one – a very good one in fact – with colourful graphics, eccentric touches like the (very British) instructions, and lovable monsters that you hate to squish. All in all, a perfect port, albeit one which scores zero for imagination. Another example of how good the Beeb could be as a games machine.

BRIAN DAY

















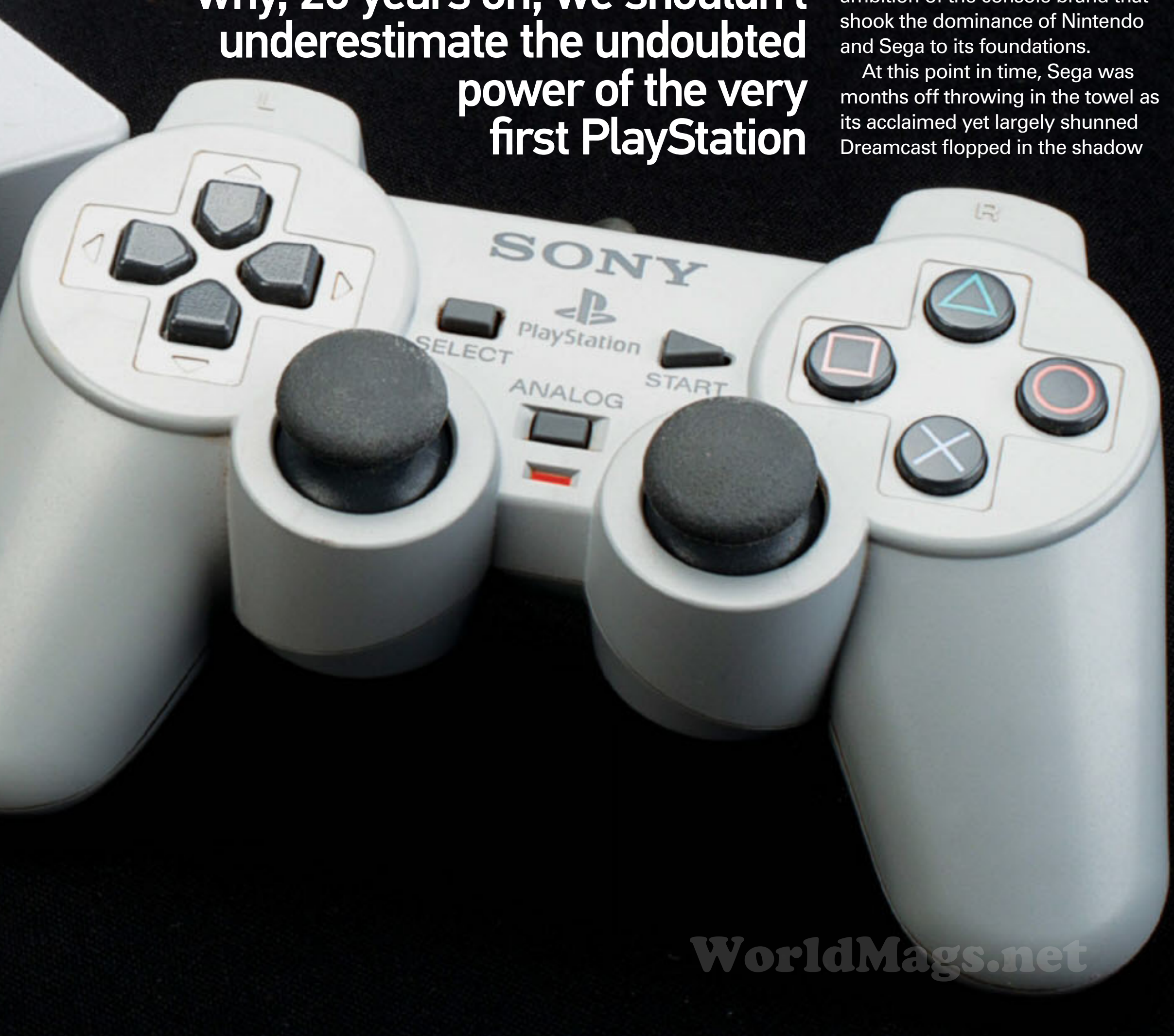
WorldMags.net

HOW THE PlayS



tation CHANGED GAMING

It was the console that arguably killed the arcades, but revolutionised the way we played at home. David Crookes looks at why, 20 years on, we shouldn't underestimate the undoubted power of the very first PlayStation



In 2000, some six years after the PlayStation had launched in Japan and with the PS2 finding its way into the sweaty hands of smitten gamers, Phil Harrison, then senior vice president for Sony Computer Entertainment Europe, spoke retrospectively of the ambition of the console brand that shook the dominance of Nintendo and Sega to its foundations.

At this point in time, Sega was months off throwing in the towel as its acclaimed yet largely shunned Dreamcast flopped in the shadow of its Sony rival. The Nintendo 64 was about to be set aside in favour of the GameCube. Atari had long been cast into the wilderness as its final console, the Jaguar, was discontinued in 1994 and its name was on the verge of being sold by Hasbro Interactive to Infogrames.

But Harrison had a different company in mind when he reflected on the manner in which the PlayStation had cleaned up the opposition and made the fifth generation entirely its own. "We wanted it to become the Hoover of videogames," he said, of the aim to make the console late-comer a proprietary eponym. "And, in many ways, it has."

It is fair to say that no gaming machine up until that point had ever had the widespread, mass-market impact of the attractive, CD-playing grey plastic box of tricks that became the PlayStation, as controversial as that may sound. Countless amazing consoles had come before it, but none of them were able to truly break into the mainstream and



» [PlayStation] 20 years ago we would have never predicted how important this logo would become.



» Although it catered for two players out of the box, it was possible to add more pads with a Multitap.

none were able to say that, nine years and six months after launch, they had sold 100 million units.

"I think really, the legacy of the original PlayStation is that it took gaming from a pastime that was for young people or maybe for slightly geeky people and it turned it into a highly credible form of mass entertainment, really comparable with great legitimacy with the music business and the movie business," says Sony's current European boss Jim Ryan.

Yet how did a console made by an outsider make such an impact? How did it become so successful that the stars of its games would adorn the covers of fashionable magazines? And why do people talk of the period between 1990 and 2000 as the era of the PlayStation Generation when the console wasn't even around for a good third of that time?

The answer is about to unfold. "I think Sony did a fantastic job in presenting PlayStation as a brand new way of playing and making games," explains Nick Burcombe, the lead designer of seminal title *WipEout*. "Sony's message about how powerful the PlayStation would be prior to launch did enough to get gamers looking at them, even though Sega's Dreamcast also had 3D capabilities and used discs too. Dreamcast was a good console but the message was loud and clear: PlayStation was even better. The message worked well."

The story of the PlayStation's origin has been well told. It's an intriguing tale of two companies; Sony and Nintendo striking a deal in 1988 to create a CD-ROM add-on to the SNES that would use Nintendo "Super Discs". Sony went further and added support for Video CDs and it took advantage of its permission to create its own standalone console which it called the Play Station (note the space), a machine that allowed for the playing of both CDs and cartridge. Sony showed off its creation to great fanfare at that year's Consumer Electronics Show in Las Vegas in 1991.

But within mere hours of the unveiling Nintendo got cold feet. It believed Sony could potentially pull the rug from under them and steal a portion of the industry so it cancelled the deal, announcing the day after that it was instead bringing rival Philips on board. Eager not to waste the huge amount of time invested in the project, Sony's president Norio Ohga ordered that development would continue without the experience of Nintendo. Ken Kutaragi who had begun his career in Sony's digital research labs was given the task of designing the machine, which Sony codenamed PSX.

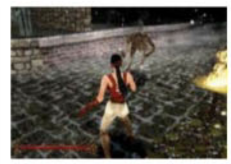
Kutaragi pooled the resources of engineers who had been working on a geometric computer graphics engine called System-G that was capable of real time 3D texture mapping for broadcasting networks. By 1992 he had a prototype ready to show his bosses, but it wasn't an easy ride for Kutaragi and his team. There was much internal resistance to the idea, with



PAUL RANSON
FORMERLY OF BIG RED
"Levels, cutscenes and music previously squished into carts could now be developed with panache and in a style that we thought emulated the movie business. PS1 for me was the proper start of the Hollywood style entertainment in the videogame business."



MARTYN BROWN
VIDEOGAME DEVELOPER AND CONSULTANT
"Back then it was all about 3D and especially the T-Rex demo that was doing the rounds – but we had our greatest PlayStation hit with a 2D game: *Worms*."



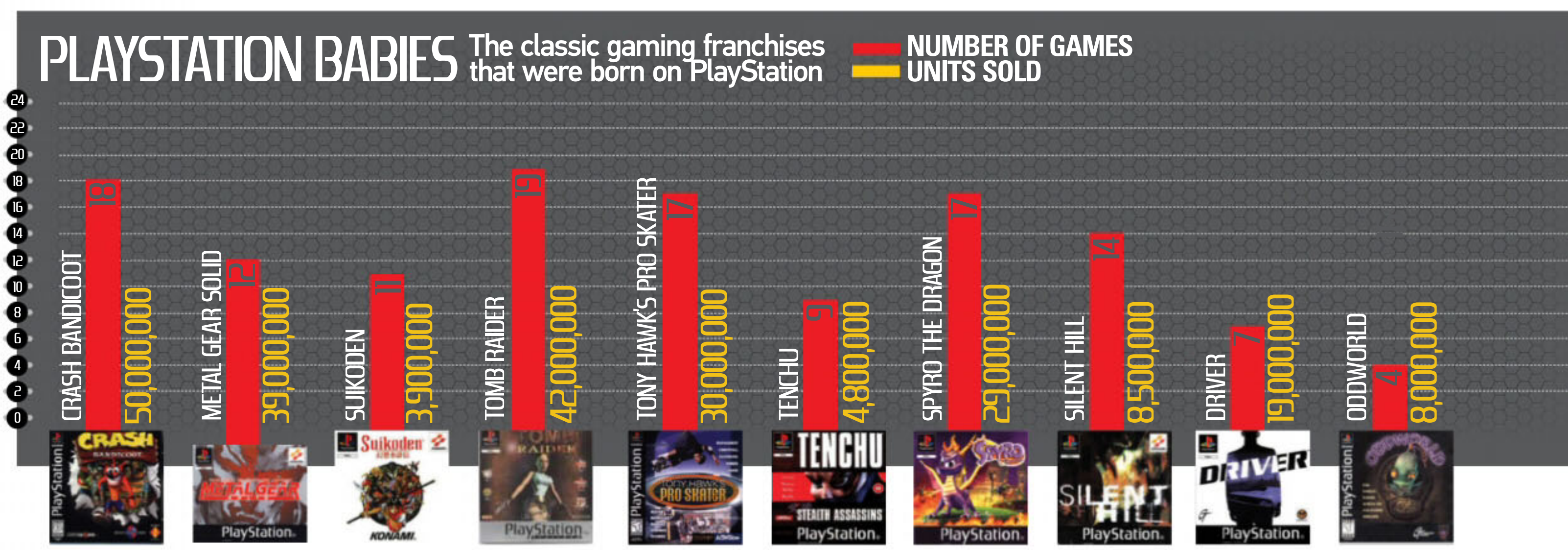
» [PlayStation] *Nightmare Creatures* tapped into the survival horror genre.



» [PlayStation] Cliff Bleszinski's favourite game is *Jumping Flash*.



» [PlayStation] *Pandemonium* was an early platformer in 2.5D.





» The PlayStation's CD-ROM-based media ensured far higher capacity than cartridge-based consoles.

DARREN FALCUS

MANAGING DIRECTOR OF HIPPO ENTERTAINMENT

"The 3D technology and internal structure meant that it was a much easier technology to develop for."



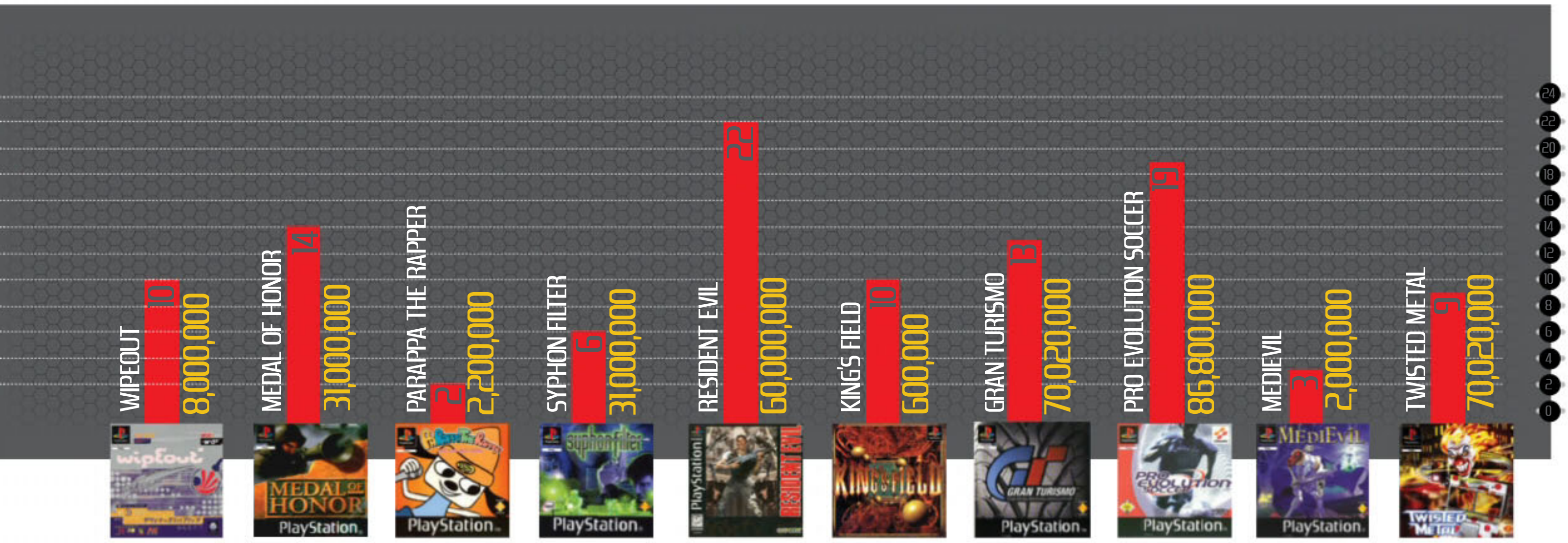
» That's right, even the power button managed to look sexy on Sony's new console.



» Games required a memory card for saving, something that meant an additional cost for gamers.



» PlayStation's additional ports let Sony add various peripherals to the console.



Sony still, overall, reluctant to become a player in the games industry. Yet Ohga's anger at Nintendo was all that was needed to overrule any doubts.

For Sony's president, it was a case of winning at all costs. He kept the project on track, agreed the purchase of British development house Psygnosis (a startling move, given Japan's previous tendency to invest internally) and, with some refinement and a bit of design prodding, the machine was geared up for launch, first in Japan on 3 December 1994 and then in September 1995 in North America and Europe (selling for £299 in the UK). The console turned heads. "Two words: dinosaur demo," remembers Brian Baglow, writer of the first *Grand Theft Auto*, of the 3D graphic display Sony had slapped on a disc for those who had pre-ordered the console. "As soon as I saw the giant walking T-Rex, I was astonished and awed."

But the dino demo wasn't the only thing that stood out. The PlayStation, which would – thanks to a small redesign and relaunch in 2000 eventually become known as the PSone – had a shapely, comfortable games controller which did away with the flat design of other machines and replaced letters with shapes. It had external memory cards with 15 save blocks that added up to 128k (an idea copied from the Neo-Geo). It also had a slick appearance. More than all of that, though, it had games. Stunning games. And people wanted to play them.

Eight games were available for the PlayStation on the first day but one truly stood out: Namco's *Ridge Racer*. It was an arcade driving sim with chunky 3D cars, wide tracks, catchy tunes and equally memorable speech; it was a title that laid down an ambitious marker and showed games could have just as much impact as music or film.

It was also a near-perfect version of the hit that had been attracting coins at the arcades and it helped



DAVID DARLING

KWALEE CEO & FORMER CODEMASTERS BOSS

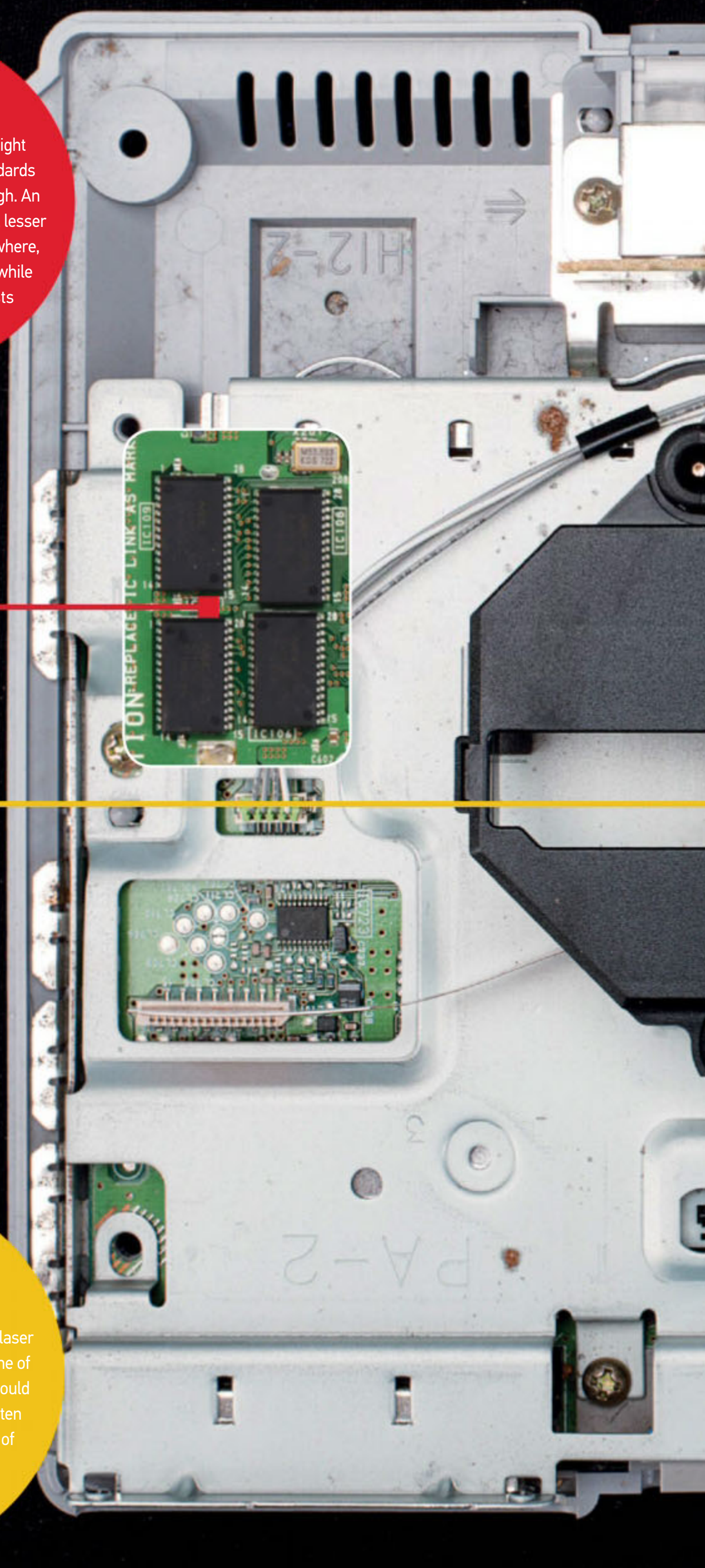
"It was the first proper 3D games console to gain significant market share and [Sony was] very active in supporting and encouraging developers. It was fun making games with 3D models and polygons rather than the 2D games we'd made for years on machines like the Sega Mega Drive."



» [PlayStation] There was no doubting the significant role that the tomb-raiding Lara Croft played in pushing *Tomb Raider* high in the charts.

UNDER THE HOOD

The components that made the magic happen

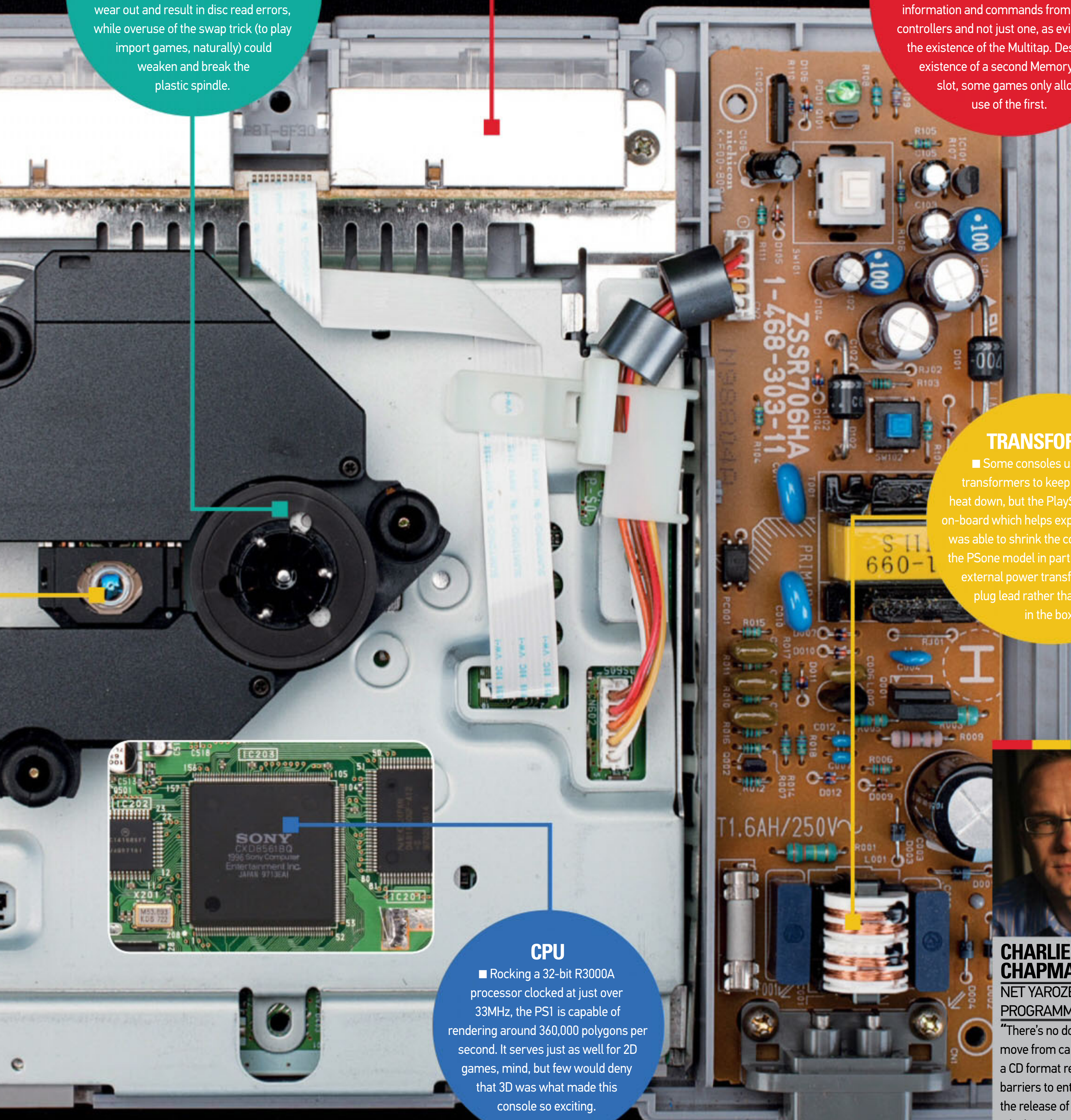


RAM

■ The PlayStation packs a whopping 2MB of RAM, which might be next to nothing by today's standards but it proved to be more than enough. An additional 4k data cache meant that lesser commands could be handled elsewhere, freeing up a little more memory, while 1MB of graphics RAM also exists for visuals.

LASER

■ Consoles are never built using top-end tech and the PlayStation was no exception. While certainly fit for purpose, the disc-reading laser used in its CD drive was the cause or some of the most common hardware failures. It could be replaced, but enterprising gamers often instead resorted to the cheaper option of balancing the console at all kinds of precarious angles to make it read discs.



MOTOR

■ That satisfying whirring sound when booting up a new game came from this x2 bad boy, capable of transferring data at 300kb per second. After extended use, the motor could wear out and result in disc read errors, while overuse of the swap trick (to play import games, naturally) could weaken and break the plastic spindle.

CONTROLLER/ MEMORY CARD SLOTS

■ Four front-mounted slots allow for up to two controllers and a pair of memory cards. The controller ports are capable of relaying information and commands from multiple controllers and not just one, as evidenced by the existence of the Multitap. Despite the existence of a second Memory Card slot, some games only allow use of the first.

TRANSFORMER

■ Some consoles use external transformers to keep both size and heat down, but the PlayStation had it all on-board which helps explain its size. Sony was able to shrink the console down for the PSone model in part by moving to an external power transformer on the plug lead rather than having it in the box.

CPU

■ Rocking a 32-bit R3000A processor clocked at just over 33MHz, the PS1 is capable of rendering around 360,000 polygons per second. It serves just as well for 2D games, mind, but few would deny that 3D was what made this console so exciting.



CHARLIE CHAPMAN

NET YAROZE PROGRAMMER

"There's no doubt that the move from cartridges to a CD format reduced the barriers to entry and led to the release of more games which perhaps wouldn't have made it before."

HOW SONY MADE GAMING COOL

The reasons PlayStation was such an important console



ADVERTS

■ It used to be that advertising agencies would target the same demographic as toy retailers when producing campaigns for games. But by making interesting and original shorts that broke free from that, Sony's marketing proved to generate both conversation and interest in the brand.

NIGHTCLUBS

■ Placing consoles running stylish and exciting games like *WipEout* in bars and nightclubs taught an entire generation one very important lesson – games aren't for kids any more, and there's a lot more to gaming than you might have thought.





GAMES OF SUBSTANCE

■ With so much more storage space, it wasn't just visuals that could be more impressive – worlds and mechanics could be far more intricate than ever before. Only a handful of 16-bit games lasted upwards of 20 hours, but PS1 RPGs would commonly come in closer to 100 hours.

PIRACY

■ What better way to hit the mainstream than to have games available for free? With the web in its infancy, blank discs constantly falling in price and several simple solutions for running unsigned code on PlayStation, piracy was undeniably a huge part of the PlayStation boom.





MATURE GAMES

■ The better graphics got, the more developers were able to use games to tell grown-up stories and faithfully cover topics that simpler visuals perhaps wouldn't do justice. Between visuals, audio and scale, we finally entered an era where games could move and affect players on a similar level to movies. This more emotional connection to games meant that they could be taken a lot more seriously as an entertainment medium.



CD FORMAT

■ It used to be that taking a few games around to a friend's house would involve lugging around a bag full of chunky cartridges. With the rise of disc-based media, one game case could hold a collection, plus the format also allowed for better audio quality than older hardware could manage.

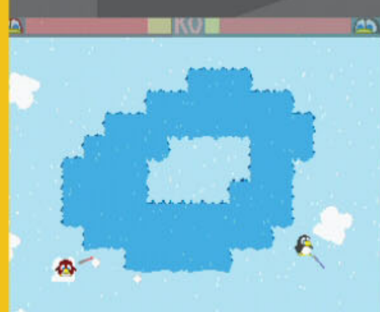


NINTENDO/SEGA

■ A lot of Sony's success came down to a fresh approach to gaming – its competitors had been butting heads for years, leading them to contest the same market. But this just allowed Sony's new audience to appreciate something new even more.

NET YAROZE

■ The Net Yaroze provided students and hobbyist programmers with a chance to make PlayStation games, opening up the traditionally closed console development scene. A small community of bedroom coders sprang up as a result.





3D GAMING

■ Clever coding allowed 3D (or 3D-style) visuals on some of the oldest hardware, but it was the scale on which the PS1 hardware was capable of rendering 3D worlds and environments that really blew us all away. Early polygon visuals haven't aged well, but it was so impressive at the time.





» [Playstation] With the tunes from *Parappa The Rapper* staying with players forever, little wonder it helped kickstart the whole rhythm-based genre.



» [PlayStation] With a gorgeous opening that showed the power of the PlayStation and great moves, *Tekken II* was a revelation.



» [PlayStation] Although it was an below-average release, *Porsche Challenge* didn't half look good.

Sony shift 100,000 PlayStations on the first day in Japan. Before long, impatient punters were splashing out £700 or more to import the console into Europe and the US and the momentum began to build. Those 3D capabilities were a major draw and suddenly gaming began to look more mature, moving away from the perception of kids playing in their darkened bedrooms to something trendy adults wanted to share while sitting on their sofa.

"The PlayStation introduced the idea of true 3D gaming to the living room and, beyond that, the mass market," says Cliff Bleszinski, whose first game *The Palace Of Deceit: Dragon's Plight* was released in 1991. "The PlayStation shifted the console from having an almost toy-like quality into the consumer electronics that are just as desired by 12-year-olds as they are by 35-year-olds."Key to this was getting developers on board and helping them through the transition from 2D to 3D. Before the PlayStation, creating 3D on consoles was no easy task but the PC had shown the possibilities with *Doom*, *Wolfenstein* and *Descent*.

The SNES, for instance, had a Mode 7 playfield which allowed for some pseudo-3D with games such as *Mario Kart* and *Pilotwings* but it could only simulate a single flat-textured plane. "There were a handful of games using the SuperFX chip for SNES, which was a coprocessor that accelerated 3D rendering on the SNES, but it wasn't a fully featured GPU as found in the PS1, and it was quite limited," explains Michael Troughton, who worked on the *Destruction Derby* games for the PlayStation while at Reflections.

"The consoles that were appearing weren't making life any easier. Sega Saturn was a powerful machine with 2 SH2 RISC CPUs and a number of dedicated coprocessors to handle audio, video, sprites and polygons but it was notoriously difficult to program for," says Michael. "Programmers had little experience with multi-processsing and it hindered them. The PlayStation suddenly opened 3D up to a much wider range of developers, with its custom graphics processor and geometry engine in hardware.

"In fact, I remember thinking it was amazing that the PS1 had the same CPU as the £5,000 Silicon graphics workstation we were using to build the 3D environments. Now almost any programmer with a minimal amount of basic maths knowledge could write a 3D game."



MARTIN HOLLIS

WORKED ON GOLDENEYE:007

"Sony cultivated the machine's association with music and club culture. Without this it is difficult to imagine *Dance Dance Revolution*, *SingStar*, *Guitar Hero*, or *Rock Band*."

Fuelled by Namco's racer, sped along by *WipEout* and propelled to a higher platform by *Jumping Flash* (which Cliff Bleszinski says remains his favourite game), 3D became the PlayStation's hallmark and it led to an insatiable demand for three-dimensional titles. Most releases for the console were 3D (the occasional *Oddworld* game aside) and the likes of *Tekken* and *Battle Arena Toshinden* continued to feed the appetite.

This changed videogaming in another way. Given that 3D was more complex, larger development teams were needed. Programmers and artists who struggled to work with 3D found themselves floundering as the new way of presenting games became expected on all platforms, and not just the PS1. "The switch to 3D was a ton of work and it required the relearning of new skills," laments one half of the Pickford Bros development team, Ste Pickford, who designed a kids cartoon game called *DragonTales: Dragon Seek*. "The massive 512 MB CDs we had to fill meant tons more graphics. It was more a feeling of 'Aaargh!' than being blown away."

Sony initially refused to grant concept approval of any 2D game, in its bid to use the beauty of graphics to attract a new breed of gamer. "It meant all game developers had to make 3D games when we were all new to it. I think this sent games backwards for a while because the PlayStation had power to burn for 2D stuff and there could have been some amazing 2D games as we all had the skills and tools to make them," continues Ste.

But as time went on, developers picked up the skills. "I've definitely experienced the hard work that comes with adapting game development to each new generation of consoles," says Michiteru Okabe who produced the art and graphics for *Armoured Core: Master Of Arena* in 1999 and has, more recently, been the producer on *Resident Evil Revelations 2*. He recalls trying to reuse textures to make a massive stage, running out of memory and redesigning it all at the last minute.

Indeed, Paul Hughes, who was working for EA when the PlayStation was launched, tells of Sony's excellent tools, documentation and all important development kit. Sony also revolutionised the technical requirements checklist and this helped to ensure a solid barrier to entry from a quality perspective.

"I found the initial transition pretty painless," he says. "I'd been writing 3D engines since the late Eighties, so I had a reasonable grasp of rendering pipelines – if anything, it was mind-numbing that it had hardware that would draw textured and lit triangles for me rather than having to obsess about every clock cycle of a software triangle rasteriser. From a visual effects perspective, it had proper, honest-to-goodness alpha blending which really helped up the ante for particle/trail/post effects."

Despite the advancements, however, the mainstream press cast doubt on the companies that were newly emerging to take a slice of the digital pie. In May 1995, the *New York Times* ran with the headline "Video Game War Looms In Hardware" and it spoke of the challenge to be dominant in the $4 billion videogame market by "introducing better, faster machines with 32-bit microprocessors that can deliver three-dimensional graphics and quicker and more intricate action than the current 16-bit machines."

Sony, the 3DO Company, and Sega were scorned for offering what were now seen to be comparatively expensive machines. "Nintendo of America and the Atari Corporation are producing machines that retain the familiar cartridge format and sell for considerably less," the piece continued, neglecting to focus on what was really important…

It was the CD-ROM drive that was so important for Sony (which, after all, had invented the CD format in 1982 in collaboration with Philips) and it was, as we saw, the entire reason the company had got involved into the videogame industry in the first place. "Sony was our key partner when we were developing the first CD-ROM games on Genesis," Tom Kalinske, the former CEO of Sega of America tells us, "Back then, none of us knew how to develop on the optical disc media but we all thought it could be great – the future for game machines." It helped to lower the cost of game production, ensuring huge amounts of cash was not tied up in pre-booked cartridge stock that may well not have sold.



JAMES RUTHERFORD

NET YAROZE PROGRAMMER WHO LATER WORKED ON STUNTMAN AND DRIV3R

"Net Yaroze added a whole new dimension to the PlayStation and it was great to be able to create games on something that was current and powerful. Having the games on a magazine cover disc was a major incentive for us."



STEWART GILRAY
CEO OF JUST ADD WATER

"You'll have to remember that 20 years ago games simply didn't do 3D at home, at least not as well as the arcades did. So when we got our Japanese import PlayStation at launch with *Ridge Racer*, we all sat around with the joypad in our hands, loaded it up, and raced like we were playing the arcade version. *That* blew us away."

» The PlayStation's pad went through numerous revisions in its live, this one introduced analog sticks.

DUALSHOCK AND AWE The evolution of the PlayStation pad

PLAYSTATION CONTROL PAD

■ The original controller and our first taste of those iconic button symbols. Also notable for popularising the use of four shoulder buttons, where most major pads would only use two.



DUAL ANALOG

■ With players wanting more precise control for 3D gaming, the Dual Analog was a prayer quickly answered. First-person games could finally be played with tight movement.

DUALSHOCK

■ Effectively the same as the previous controller, with motors fitted into each handgrip for vibration. It also brought two additional buttons, namely L3 and R3 mapped to clicking the analog sticks.

DUALSHOCK 2

■ While cosmetically and technically very similar to the original DualShock (to the point where originals would work on PS2 as well), there was one major change: every major button was analog rather than digital.



DUAL ANALOG

■ With players wanting more precise control for 3D gaming, the Dual Analog was a prayer quickly answered. First-person games could finally be played with tight movement, while inventive devs could create quirky uses for a pair of sticks, as seen with launch title *Ape Escape*.





» [PlayStation] Some tried to make out that Crash Bandicoot was the PlayStation mascot but, as it turned out, the machine didn't need a Mario or Sonic equivalent.

"The move to disc was a huge but natural and necessary change," says Dave Ranyard, the current London Studio boss of SCEE. "Prior to that, we had cartridges and before that dedicated machines, but the ability to store tons more data for our games improved them no end, graphically, musically, and in terms of scope. Disc is a very cheap and efficient method of distributing lots of data."

The disc also allowed for the streaming of a lot of data. Movies could play back in 16-bit colour thanks to the dedicated MDEC hardware. "Then of course you had CD quality audio that you could stream off the media rather than a MIDI track with less than stellar instruments," says Paul Hughes. "Everything about it just oozed quality – right from the boot-up sequence."

PlayStation cemented CD soundtracks as the standard throughout the industry. Until that point most gamers were content with the chip-music that consoles offered, excellent as it was. "But after people started hearing tracks they recognised by the Chemical Brothers and Leftfield in their games, chip-music became unacceptable really fast," says Colin Anderson, who headed up the audio team at DMA Design from 1993 to 2000 before leaving to create Denki, the world's first digital toy company.

"It kicked off some sizeable investment in audio development as teams struggled to switch from chip-music to full CD-quality soundtracks," he continues. "I enjoyed a front row seat on that particular roller-coaster as we were working on the audio design for the game that would eventually become *Grand Theft Auto*. When we started development we fully expected to be using chip-music, but within six months it became clear we needed to up our game if we wanted to compete with all the other great games that were being released. *WipEout* was the straw that finally helped me convince [boss] Dave Jones that DMA needed its own music studio."

The PlayStation tapped into modern-day culture like no other games console had ever achieved before, positioning itself in style mags and persuading celebrities to grab a joypad in the wake of videogames' new cool status. ("I was getting carried away playing *Tekken II* and *Tomb Raider* for hours on end," excused England goalkeeper David James when he conceded three times against Newcastle in 1997.)

But music and the PlayStation, in particular, went hand-in-hand. Developers started to experiment with audio, putting it at the heart of titles such as *Vib-Ribbon* and *PaRappa The Rapper* which led to rhythm-based game crazes such as *Dance Dance Revolution*. They also tapped into the Nineties music vibe of techno and house. The PlayStation ingratiated itself with the growing underground club culture and the sound of big names such as Orbital, Leftfield and The Future Sound Of London.

In Liverpool, where *WipEout* was made, the emerging super-club Cream was positively surreal. Bass pounded, strobes flashed, people danced and then, they stopped, they stared, they gravitated towards the PlayStation pods that had been placed there, just as they had in dozens of other clubs up and down the country, and they played. "We knew something significant about gaming had changed," continues Nick Burcombe, who now heads up Playrise Digital. "It was pretty amazing really."

In London, New York, Tokyo and hundreds of cities in between, clubbers were relaxing between DJ sets with a few rounds of *Virtua Fighter* or *WipEout*, which was the first game to incorporate licensed music. "PlayStation was bringing gaming out of the bedroom and into the mainstream in a way no other company had," says Colin. "That's what changed gaming forever. It wasn't the hardware."

Aggressive infiltration of this kind, together with an approach to marketing that was wildly different to much of what had gone before was repositioning gaming as a cool pursuit. "At the time of its launch I was a student and I'd always been into videogames from the early days of arcades," says Dave. "I

ESSENTIAL EXTRAS

Six of the best Sony peripherals

x5 images © Evan-Amos

POCKETSTATION



■ Effectively a portable device akin to the Dreamcast's VMU, PocketStation never saw the light of day outside of Japan. Over 50 games supported this interesting device, which plugged into the console via the memory card port and had its own LCD screen.

MEMORY CARD



■ While cartridges sometimes allowed game data to be saved to internal memory, the CD format offered no such luxury. Sony's solution was a proprietary storage solution – a 15-block 1MB memory card to which game data could be saved.

MULTITAP



■ Two controller ports was enough for most games but to fully enjoy something like *Micro Machines V3* (whose predecessor had additional ports built into the cartridge itself) or Bomberman, you'd need more. Enter the Multitap.

GUNCON



■ Light gun arcade games were all the rage around the time the PS1 rose to power, and this accessory, originally released to allow *Time Crisis* to be played at home, proved to be one of the most accurate home approximations of the arcade experience.

GAMESHARK



■ Plugging into the console's parallel port, these cheat devices allowed game code to be modified to activate cheats, alter elements of a game or even to access content that wasn't in the final build, including additional scenes in *Final Fantasy VII*.

DUALSHOCK 3

■ As costs fell and tech improved, Sony was soon able to reintroduce rumble to the Sixaxis template and the DualShock 3 was born. It quickly superseded its forerunner as the PS3 standard and Sixaxis was discontinued in mid-2008.



DUALSHOCK 4

■ The first full evolution in the life of the DualShock, the PS4 pad adds many new features. Sixaxis motion control remains, with a rear-mounted light bar allowing a camera to better place the handset for accuracy. It also adds a touch pad and Options and Share keys.





» [PlayStation] *WipEout* was one of the UK launch titles for the PlayStation and it took both the gaming and the wider world by storm.



» [PlayStation] As the sequel to *Flashback*, the action-adventure *Fade To Black* only made it to the PlayStation (and PC).

would hang around playing *Space Invaders* and *Galaxians* and until the PS1 came out, that kind of thing made me a geek. But this console changed all that – suddenly videogames were cool – not just acceptable, but actually club culture cool. With a soundtrack from the coolest techno and dance DJs, videogames became a part of sub-culture. And it led to a more mainstream acceptance of consoles in general."

It helped the console to continue to attract adults, a strategy that Sega had already begun but Sony seemed to perfect. One of the keys to this was Steve Race, boss of Sony Computer Entertainment of America. Race had worked under Kalinske at Sega and he had no problem competing with his former workers (indeed, he infamously took to the stage at the inaugural E3 in Los Angeles just after Sega had announced the Sega Saturn at a price point of $399, muttering one word – "$299" – and walking off to great applause).

"Steve knew our strategies of going after an older audience and being edgy and competitive in advertising," continues Tom Kalinske. "He knew we would do everything we could to come across as the superior 'cool' brand, and he did this very well. But I don't think Sony did anything other than copy lots of aggressive marketing that we had done at Sega initially with Genesis." And yet, Sony took its marketing to a different level.

Although ads did target children (*Croc* was plastered on bus shelters near schools) titles like *Resident Evil* were certainly aimed at an older audience and developers did all they could to grab their attention. The disgraced former publicist Max Clifford used the tabloid press to whip up a publicity frenzy for controversial titles. Games such as *Grand Theft Auto* and *Cool Boarders 2* made the papers by talking of "having to get higher than last time" in ads (Darren Carter, the then senior product manager at SCEE, defended this move, saying, "the wording is genuinely how snowboarders talk").

One of the most memorable adverts, though, was *Double Life* which had been created by ad agency TBWA. Written by James Sinclair, it became a classic, its lengthy monologue showcasing eccentric individuals describing what they did in their free time. "I won't deny I've engaged in violence, even indulged in it," says one, to the tune of Fauré's *Requiem* as he describes – the viewer discovers later – his fantasy PlayStation life. In 2007, the advert, directed by Frank Budgen, was accepted into the Clio Hall of Fame.

Sony's brief was to the point. It wanted to "break out of a core consumer base of geeky pubescent teenage boys by bringing a broader acceptability and dignity that was absent from the sector." Sinclair cross-cast the advert, showing policemen breaking the law and vicars committing all sorts of sins ("this got softened somewhat – inevitably," he tells us). The idea was to put people at the centre of gaming. The advert contained no gameplay footage or screenshots.

"People's imagination is the most powerful element of the gaming experience, more than the graphics, sound effects, atmosphere and so on. That's what really puts them in the moment," James says of the ad that was shot for television and cinema. "I'd thrown in some off-the-beaten-track words and phrases like 'hoi polloi' to give the piece a sort of anachronistic vibe. It gave it a timelessness that has served it well over the years."

And yet, away from the camera, Sony was putting games centre stage, signing exclusive deals for the best games, among them *Tomb Raider*. The second and third titles in the series made the PlayStation their console home and it led to increased sales. "I remember getting our hands on the original *Tomb Raider* when we were working on the original *GTA* and thinking, 'Oh f***'," says Brian, on the impact the game had.

But it wasn't hard to persuade companies to climb aboard. "Behind the scenes, Sony offered developers a better deal than its competitors," says David Banner who worked on *Tomb Raider* as a tester. "It gave better royalties and it promoted games well. It understood that having the best console relies on having content so the more developers it got on board the more titles it'd have for the customer to digest. Nintendo and Sega primarily relied on their titles being developed in-house, whereas Sony saw the potential of opening up development to third party developers."

Those third-party developers seized this opportunity, understanding what a console with such a large user base could offer. Programmers and artists looked for new ways to take advantage of 3D and they also sought to tap into current trends such as extreme sports, generating games like *Tony Hawk's Pro Skater* and leading to many a big budget PlayStation event. Over the course of the PlayStation's lifetime, the age of developers also began to rise, with graduates seeing a stable career path in the industry. "Two of the guys on the *Destruction Derby* team were still in their teens – that would be unheard of today," says Michael.

That said, Sony also came to embrace smaller, independent developers by releasing a development kit called the Net Yaroze. The problem with previous consoles was the cost of developing for the systems. They were, by and large, closed shops. But with Net Yaroze, a small outlay was enough to bag a kit and start making games, some of which ended up on the cover disc of the *Official PlayStation Magazine* which, thanks to the number of demos it would give away, began to reach a sales figure of over 450,000.

"We used the Net Yaroze to teach console programming at the University of Abertay in Dundee



» [PlayStation] *Ridge Racer Revolution* was the chunky car sequel to *Ridge Racer* but the gameplay remained entirely unchanged.



STEVE LYCETT SUMO DIGITAL

"To understand the impact, you've got to remember that when we first got our hands on the PlayStation hardware it was a revelation on a number of fronts. First, it was the first proper dedicated 3D console – this is in a pre-3DFX/PowerVR accelerated PC graphics era, too. So the results you could achieve quickly and easily were way in front of anything else. Next, having spent so long working with limited cartridge budgets, having a whole CD you could fill and plenty of memory (2MB was a lot back then!) opened the door to bigger levels, better audio, cutscenes and really going to town on the presentation as much as the game. You could say any one of those components existed individually, but it was the PlayStation that pulled it all together in one powerful and complete package."

THE 20 MOST IMPORTANT MOMENTS IN PLAYSTATION HISTORY



SONY GOES IT ALONE

1 After talks with Nintendo to develop a disc-based add-on for the SNES, Nintendo shockingly revealed a partnership with Philips, which ultimately came to nothing. Sony's work was not in vain, however – the groundwork for PlayStation had already been done.

ARCADE-PERFECT PORTS

2 Flick through old magazines and you'll find the term 'arcade perfect' applied in so many inaccurate ways. With *Ridge Racer* and the many coin-op ports that followed, though, it really *was* true a lot of the time.

CD CAPACITY = BIGGER GAMES

3 Cartridges could only allow a certain amount of data to be stored, with no easy way of swapping between them. The compact disc medium changed this, allowing for console games that spanned as many as five discs.

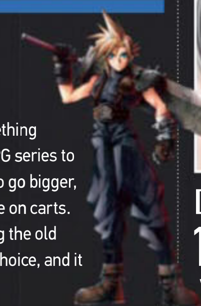


PLATINUM PRICING

4 With gaming growing more popular, Sony made the smart move of adding its most successful games into the Platinum range, slashing prices to help them shift more copies.

ANYONE CAN MAKE GAMES

5 The Net Yaroze remains one of the coolest hardware iterations ever, a developer console that effectively anyone was able to create games for. The best of these would be showcased via the official mag's demo discs.



FINAL FANTASY JUMPS SHIP

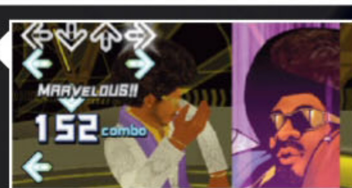
6 The only way for something as epic as Square's RPG series to evolve was to go 3D and to go bigger, a combination not possible on carts. With Nintendo still backing the old format, Square had little choice, and it was a huge coup for Sony.

MARKET AWARENESS

7 Smart advertising made PlayStation the coolest brand in gaming in the space of a few relatively simple campaigns – Sony managed to build the idea of gaming being something more than just a nerdy pastime in mere months.

JUST DANCE

8 Cheap plastic dance mats are nothing compared to the glorious coin-op stages (assuming they work properly) upon which the best perform, but bedroom pop stars didn't care. It just felt good to step on arrows.



SWAP TRICK

9 Who *didn't* know the method of getting import games and even illegal copies running on a PS1? Broken spindles and motors were common, but you could play whatever you wanted.

SMALLER, YET SMARTER

10 A revised PlayStation known as the PSone launched in 2000, with its little form and more cost-effective use of components allowing Sony to sell it for less than the original console. It also did away with many popular piracy methods.

GTA3 INVENTS A GENRE

11 DMA's silly crime sprees were fun, but *GTA* only really shot to notoriety when contained realistic and free open-world sociopathy.





DON'T HATE THE PLAYER, HATE THE GAME BOY

12 Sony's plan for Vita was simple – take on Nintendo's handheld dominance by offering console-quality games on the go. Despite huge *Monster Hunter*-fuelled success in Japan, neither PSP nor Vita really managed to break the western market, but Sony still hasn't given up trying just yet.

DVD READY

13 Choosing DVD as a primary format for games was risky, but it also placed the PS2 among the most affordable DVD players available during the format's boom. Want a DVD player? Might as well get one that plays games too…

LEAP YEAR BLUES

14 Original PS3 models were hit by a bizarre bug on 1 March 2010 when an error on the console's internal calendar assumed incorrectly that 2010 was a leap year and proceeded to implode on itself.

LIGHTS, CAMERA…



15 The rise of EyeToy led many (including the other modern major platform holders, apparently) into believing motion control was the future. At least everyone got that wrong, but it was fun while it lasted.

$599

16 The announcement that the PS3 would be worth getting a second job to pay for didn't do all that much to help its early performance – Sony had to do a lot of work to get it even close to the 360 in terms of units sold.



PSN HACKED

17 In April 2011, Sony's PSN network was hacked and the details of around 77 million users compromised in the process. The downtime lasted for several weeks and while something of a disaster, it clearly taught Sony some valuable lessons as it hasn't fallen foul to a similarly devastating attack since.

PS PLUS

18 With Microsoft hiding online play behind a paywall, Sony played it smart – keep online play free (at least on PS3) and instead offer free games for recurring subscribers. The model works, and even third-parties are getting involved now.

ANYTHING YOU CAN DO…

19 Sony's confidence in countering every poor decision made by Microsoft was an easy highlight of E3 2013, but the brazen approach to everything – including pricing – easily explains Sony's return to prominence for this new generation of consoles.

LOVING THE INDIES

20 Whatever you think about Sony's triple-A PS4 line-up, its selection of indie and retro titles is superb. From *Resogun* and *Oddworld* to *Grim Fandango* and *Final Fantasy VII* (a PC port, sure, but it's better than nothing, right?), Sony is doing its bit to keep old-school gameplay alive.



LAUNCH GAMES REVISITED

Sony's PlayStation launch games are now two decades old. We were keen to see how they still fare…



KILEAK: THE BLOOD

"This failed to impress gamers 20 years ago, and it's still a shambles today. The lo-fi visuals and clunky controls are rather charming, but the deathly dull gameplay creates a miserable gaming experience" **DARRAN**



NBA JAM: TOURNAMENT EDITION

"Visually, this isn't too much of a jump up from the previous generation, but as far as gameplay goes, this still stands up today as a great game to play with friends, even if I am still terrible at it even all these years later…" **JON**



STREET FIGHTER: THE MOVIE

"This is a great game for all the wrong reasons. The animation is laughably poor, while the difficulty level is all over the place. It's nowhere near as dull to play as *Toshinden*, but it remains a disappointingly average brawler" **DARRAN**

LAUNCH GAMES*

- **A-TRAIN IV EVOLUTION** JAPAN
- **BATTLE ARENA TOSHINDEN** US/UK
- **CRIME CRACKERS** JAPAN
- **ESPN EXTREME GAMES** US
- **GOKUJÖ PARODIUS DA! DELUXE PACK** JAPAN
- **KILEAK: THE BLOOD** US/UK
- **MAHJONG GOKU SKY** JAPAN
- **MAHJONG STATION MAZIN** JAPAN
- **NBA JAM: TOURNAMENT EDITION** US/UK
- **NEKKETSU OYAKO** JAPAN
- **POWER SERVE 3D** US
- **THE RAIDEN PROJECT** US
- **RAPID RELOAD** UK
- **RAYMAN** JAPAN
- **RIDGE RACER** US/UK
- **STREET FIGHTER: THE MOVIE** US/UK
- **TAMA** JAPAN
- **TOTAL ECLIPSE TURBO** US
- **WIPEOUT** UK

*IT'S WORTH NOTING THAT EVEN SONY UK DOESN'T HAVE COMPLETE LISTINGS, BUT RESEARCH SUGGESTS THE ABOVE LIST IS CORRECT

RAPID RELOAD

"It's not quite as good as *Gunstar Heroes*, which it is clearly trying to imitate, but it's still a great blaster that's probably more appreciated now than it was back then" **NICK**





CHARLES CECIL

REVOLUTION SOFTWARE BOSS AND CREATOR OF BROKEN SWORD

"The PlayStation oozed sex appeal. Sony's inspired marketing quickly made videogames hip. And the team at Sony were amazing – a small team of inspirational, creative people who were re-defining the industry: re-writing the rule book. The two *Broken Sword* games were incredibly well received, being voted amongst the top ten best PlayStation games by *Official PlayStation Magazine* readers. PlayStation launched a new epoch."



BATTLE ARENA TOSHINDEN

"I'd probably have been thrilled at the time with this, but while it looks the business it just doesn't play that well. It's easy to see how *Tekken* became more popular..." **NICK**

RIDGE RACER

"Riiiiidge Raaaaaaacer! Yes there's only one track, but what a track! It still controls exceptionally well, while the jaunty music and challenging track design will keep you chasing those top times" **DARRAN**

JUMPING FLASH

"This was probably just as odd a game back then as it is now, but I can imagine that for its time it really stood out from anything else. The soundtrack is definitely worth a mention as well" **JON**

at a time when educational establishments could not get their hands on the full development kit," says Professor Ian Marshall, whose department at the Uni received a staggering 40 Net Yaroze kits for its computer games technology Masters and Undergraduate students. "It was close enough to the real thing that transferring from Net Yaroze to the full dev kit did not take much re-learning."

As a result, scores of student programmers were able to write tight code to run on a PlayStation and it opened up a vibrant community of home developers across the world. Just as the Spectrum and BBC Micro created many of the leading UK games developers of the Eighties, so the Net Yaroze contributed to the development of the independent and studio developers we have today. Mitsuru Kamiyama created the RPG *Terra Incognita*. He ended up working on the *Final Fantasy* series which, despite having made its debut on the NES, became one of the PlayStation's most popular titles.

Final Fantasy was one of a large number of games that made the PlayStation such an iconic hit. While Nintendo continued to concentrate on Mario and Sega on Sonic, Sony had no real mascot despite desperate attempts by some players and media to intrinsically link Crash Bandicoot to it. Instead heralded a eclectic era of massive franchises that ran and ran, from *Resident Evil*, *Tomb Raider* and *Tekken* to *WipEout*, *Driver* and *Grand Theft Auto*. Racing sim *Gran Turismo* sold more than 10 million copies.

PATRICK BUCKLAND

CEO, STAINLESS GAMES

"I was actually involved with them pre-launch. Sony was determined not to fall into the same trap as the CDi and the 3DO and try to be everything to all men. They were clearly a games console through and through, not a multimedia device. They also took the start that Sega had made with the Mega Drive and made the PlayStation a games console that you didn't feel embarrassed of."

Most astonishing of all, for the PlayStation, was that the hunger for games was high. In May 1998, Chris Deering, then president of Sony Computer Entertainment Europe, said five or more games were being sold per PlayStation – "at least 50 per cent better than it ever got on 16-bit". At that stage the average age for a PlayStation gamer was 22. The PlayStation was keeping the Eighties kids playing while attracting new audiences.

Sony continued to tinker. It advanced on the N64's Rumble Pak with the DualShock pad in 1998 bringing vibration feedback and it introduced a Platinum budget range for older games that had sold more than 150,000 copies, bringing the cost of console gaming down further. They included *TOCA*, *Die Hard Trilogy*, *Fade To Black*, *Formula 1*, *Time Crisis*, *Micro Machines V3* and *V-Rally*. The PlayStation was also keeping pace: games made at the end of the PS1's life were far more visually stunning than those at the start.

"Sony jumped into the games business, disrupted it and succeeded in much the same way that Apple jumped into the portable music business and took over," says Michael Troughton. "The branding was cool, the device was powerful, the technology was good, the business model was better and the timing was right. All of these things made it successful." *

The 20 Greatest PlayStation Games

YOU'VE NEVER PLAYED



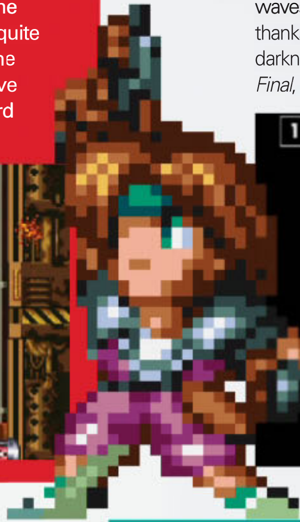
Though it was a hugely successful machine, there's more to the PlayStation than million-selling mega hits. Nick Thorpe leads the expedition to unearth some hidden gems…

Rapid Reload

■ **DEVELOPER:** MEDIA VISION ■ **YEAR:** 1995 ■ **GENRE:** SHOOT-'EM-UP

20 **This run-and-gunner** made an appearance at the PlayStation's European launch, but it was passed over by a public hungry for the 3D games that were still a huge novelty at the time and that's a real shame. Though its visuals were only slightly enhanced over the capabilities of the SNES, the game itself was a riot. Developers Media Vision were very clearly influenced by Treasure's *Gunstar Heroes* (a fact evident in the original Japanese title *Gunner's Heaven*), and while it's not quite as good as the Mega Drive classic, it packs much of the same appeal with loads of on-screen carnage and some impressive weaponry. PAL copies are scarce, but it shouldn't be too hard to track down the Japanese version.

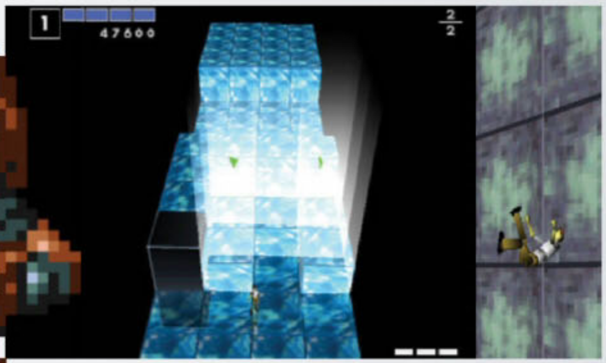




Kurushi

■ **DEVELOPER:** G-ARTISTS
■ **YEAR:** 1997 ■ **GENRE:** PUZZLE

19 ***Kurushi* enjoyed a** relatively high profile due to its placement on demo discs, but very few people actually appear to have picked it up. Set on a platform of floating blocks, you play as a man whose goal is to survive by clearing waves of massive blocks rolling towards him, while avoiding the black penalty blocks. Failure to do so correctly will result in the platform shortening, giving less room to tackle the oncoming waves. It's a tricky puzzler, which boasts an oppressive atmosphere thanks to its stark aesthetic – it's just you, the blocks and the endless darkness that waits below. There's also a sequel available titled *Kurushi Final*, which adds extra game modes for the most hardcore players.



"Kurushi is a tricky puzzler, with an oppressive atmosphere thanks to its dark aesthetic"



Pepsiman

■ **DEVELOPER:** KID ■ **YEAR:** 1998 ■ **GENRE:** PLATFORMER

18 **Many years before** the likes of *Temple Run* popularised the runner sub-genre on mobile phones, Japanese gamers got to experience the genre as a soft drink tie-in. *Pepsiman* sees our near-mute hero sprinting from destination to destination in order to ensure that people get their Pepsi. Thankfully, the game frequently throws up ridiculous situations in order to keep the action fresh – our hero can be found running while stuck inside a bin, or being chased by a giant can of Pepsi. Despite being a Japanese game the voice acting is all in English, so this is a remarkably import-friendly release – but it's tough enough to be unfriendly to players.



Tombi!

■ **DEVELOPER:** WHOOPEE CAMP ■ **YEAR:** 1997 ■ **GENRE:** PLATFORM

17 **The Koma Pigs** have stolen a bracelet from Tombi's grandfather, and that's something he just won't stand for. As a result, our pink-haired protagonist sets out on a quest to retrieve it, while leaping on pigs and chucking them about the place. It's all rather uncivilised, but he is a caveman after all. This adventure platformer isn't divided into stages, but calls to mind the formula of the later *Wonder Boy* games as it takes place as one long quest, in which, you'll always be pursuing multiple goals at the same time.

The high quality of Tombi's first adventure didn't ensure sales success, and the game was overlooked upon release, being seen as outdated due to its 2D gameplay. A sequel with fully 3D visuals was released later on, but it too failed to find a great deal of success and Whoopee Camp disbanded shortly afterwards. As a result, both *Tombi!* and its sequel are rare and expensive games, with the original typically changing hands for £50 or more.





World's Scariest Police Chases

■ **DEVELOPER:** UDS ■ **YEAR:** 2001 ■ **GENRE:** DRIVING

16 **Though the launch** of the PlayStation 2 in 2000 drew a lot of attention away from its older sibling, the PlayStation still had plenty left to offer players that stuck around through its later years. This excellent and oft-overlooked licensed driving game is testament to that – it plays a lot like *Driver*, but with the player cast more definitely on the good side of the law. Chasing down criminals and ramming them off the road is the order of the day and if they're particularly hard targets, you'll be authorised to use firearms to assist in their capture. John Bunnell, the host of the TV series, provides the voiceover work for each mission in the dramatic tone that has made him famous. It's easy to pre-emptively dismiss the game thanks to its licence, but give it a go – you'll be pleasantly surprised.



Suzuki Bakuhatsu

■ **DEVELOPER:** SOL ■ **YEAR:** 2000 ■ **GENRE:** PUZZLE

15 **Sometimes, it's hard** to be a woman in Japan. You wake up, thinking it's going to be a relatively normal day, and then you try to eat an orange – but it turns out that the orange is a bomb. Luckily, our protagonist just happens to be the daughter of a bomb disposal expert, which is a good job because she runs into disguised explosive devices *all the time*. Yes, it's another odd game in which heavily stylised cutscenes meet bizarre objectives, as our protagonist has to defuse devices concealed as guns and even the moon.

The actual gameplay involves deactivating bombs by carefully removing screws and cutting wires. Devices gradually become more complex, and certain moves will make others inaccessible so you have to consider your options, while also being mindful of the game's time limit. Further complicating matters, you'll often come up against dead ends and traps, meaning that one wrong move can see you rest in pieces. As you might have guessed, *Suzuki Bakuhatsu* is an import game. The screen text is all in Japanese but the game is generally intuitive enough to be playable without knowledge of the language.



Incredible Crisis

■ **DEVELOPER:** POLYGON MAGIC
■ **YEAR:** 1999 ■ **GENRE:** PARTY

14 **You might have** had a bad day at work, but nothing like what poor Taneo has to deal with. Things start going wrong when a massive globe begins to crash through his office, and quickly escalate to plummeting elevators, shocking quizzes from paramedics and more. What's more, this mini-game collection succeeds primarily because it's a lot of fun and packs in a good amount of content – 24 mini-games should provide plenty of variety. However, *Incredible Crisis* also achieves the rare feat of being an intentionally funny videogame thanks to some strong visual gags. The game surprisingly managed to receive a worldwide release, so you shouldn't run into much trouble trying to acquire it.



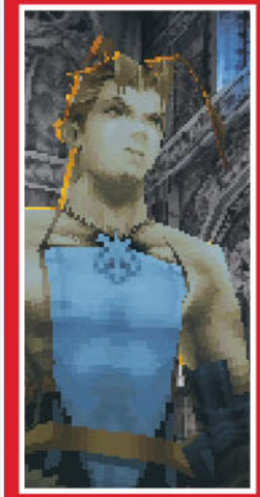
"There's a lot of depth to Devil Dice. The main puzzle mechanics are well constructed and the puzzle mode delivers lots of challenging problems"

Tobal 2

■ **DEVELOPER:** DREAMFACTORY
■ **YEAR:** 1997 ■ **GENRE:** FIGHTING

13 **While its predecessor** gained a worldwide release, *Tobal 2* was unfortunately confined to Japan. That means that most gamers haven't experienced one of the most interesting fighting games of the 32-bit era, which features some interesting innovations from *Virtua Fighter* and *Tekken* director Seiichi Ishii. Chief amongst these is a complex grapple system, which is unmatched in most one-on-one fighters due to the increased prominence of clinch strikes and transitions more common in pro wrestling and MMA games. Another factor setting the game apart is its RPG-style quest mode, a huge addition to the game, which grants access to dozens of unlockable fighters. All of this is represented with high-resolution visuals at 60 frames per second, which show off Akira Toriyama's outlandish character designs. There will never be another fighter like it, so be sure to give it a try.





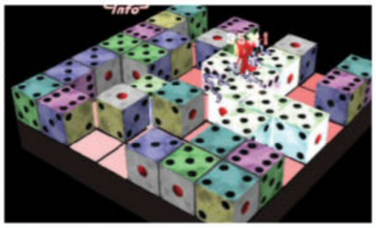
Vagrant Story

■ **DEVELOPER:** SQUARESOFT
■ **YEAR:** 2000 ■ **GENRE:** ACTION-RPG

12 ***Vagrant Story* is** an odd one – it received overwhelmingly positive reviews upon release, but never achieved the fame of Squaresoft's *Final Fantasy* series. The later years of the PlayStation's life saw a trend for cinematic storytelling in videogames develop, and *Vagrant Story* excels at this. However, it's actually a decidedly old-school game – you won't find any tedious "Find The NPC" quests or dull shopping here, just action and adventure. The adventuring elements of the game call to mind classic isometric adventures such as *Landstalker*, while the in-depth combat allows targeting of individual limbs, allowing you to strategically disable your enemies.

Devil Dice

■ **DEVELOPER:** SHIFT
■ **YEAR:** 1998 ■ **GENRE:** PUZZLE



11 **We're prone to** describing puzzle games as devilishly challenging, and this one doesn't even attempt to hide its satanic allegiances. This is a block-matching puzzler, in which the goal is to match faces on six-sided dice by running them around the grid. While you're on top of the dice, each step rolls them over – when you're on the floor with them, they'll slide around on the bottom face instead of rotating. Each face needs to be matched with the appropriate number of its counterparts – twos are easy to clear but sixes are much harder. However, higher numbers bring higher rewards.

There's a lot of depth to *Devil Dice*. The main puzzle mechanics are well constructed and the puzzle mode delivers lots of challenging pre-set problems featuring variant rule sets, such as different floors and immovable metal blocks. If you enjoy it, there's an even more obscure PS2 sequel called *Bombastic*.



Power Diggerz

■ **DEVELOPER:** TAITO ■ **YEAR:** 2000 ■ **GENRE:** PARTY

10 **No, we haven't** got the genre wrong – in a just world, *Power Diggerz* would be remembered as one of the best mini-game collections ever to hit the market. The game sees you placed in charge of some heavy-duty construction equipment, performing tasks like scooping sand, tearing down buildings and clearing paths blocked by volcanic rocks. However, the serious stuff isn't the reason why *Power Diggerz* is so appealing – the real joy lies in the mini-games, in which you perform bizarre tasks like scooping turtles from a swimming pool and serving curry onto giant plates. If you can think of a bizarre way to utilise a power shovel, it's probably in this game.

The game is put together fantastically well, and offers the multiplayer mode required to become a proper party classic. Unfortunately, there is one particular flaw that keeps it from reaching its full potential – the control system. While intuitive and responsive it uses every button on the pad and thus requires players to spend some time learning to play properly. It's clearly been done for the love of heavy machinery, which the game exhibits in spades – all the vehicles are licensed Komatsu models. You certainly can't accuse Taito of failing to make the most of the game's subject matter.

Power Diggerz seemed to have everything going for it upon release – it went down well with the press, earning scores as high as 92% in Play, and hit the shelves at a budget price. It's even got the universal sign of high quality: an intentionally misspelled title which uses Z to pluralise a word. Unfortunately, by the time the game made the journey to international audiences in 2001, much of the gaming market had already moved on to newer consoles. Go back and pick up a copy, because you'll really *dig* it.



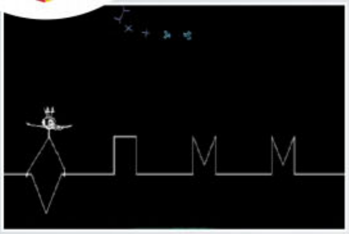
Aquanaut's Holiday

■ **DEVELOPER:** ARTDINK
■ **YEAR:** 1995 ■ **GENRE:** SIMULATION





9 **Artdink was unafraid** to experiment with Sony's console, leading to this undersea exploration game. Much of the action involves simply exploring the ocean, searching for fish, crabs and the like as well as occasionally finding unusual landmarks, such as ruins of sunken cities. As you explore, you gain more resources in order to build an artificial reef to attract marine life, with the ultimate goal being to gather as much stuff as possible in one area. It's a very slow-paced game with little in the way of traditional structure, but the experience is worthwhile – there really isn't much like this on any console, and it serves to highlight the diverse range of software available on the PlayStation.



Vib Ribbon

■ **DEVELOPER:** NANA ON-SHA
■ **YEAR:** 2000 ■ **GENRE:** RHYTHM ACTION

8 **While it's likely** that you've heard of *Vib Ribbon* thanks to demo discs and the cult classic status it has attained, far fewer of you are likely to have played it – particularly readers in North America, who didn't receive the game the first time around. Your goal is to guide the rabbit Vibri over obstacles in time to music, as she skips merrily down the line (a literal line, as this is a black and white wireframe game). That's standard fare for the rhythm action genre, but what sets *Vib Ribbon* apart is the option to generate stages from your own CDs. Much of the fun comes from simply seeing how the game reacts to your musical tastes – fans of speed metal and hardcore techno be warned, your CD collection might just cause blistered thumbs.

Sanvein

■ **DEVELOPER:** SUCCESS
■ **YEAR:** 2000 ■ **GENRE:** SHOOT-'EM-UP

7 **This kind of** shoot-'em-up wasn't the most popular type of game on the market by the time it reached the West, and it was pushed out by budget publishers as a result. While the game offers a decent weapon choices, *Sanvein*'s stark blue aesthetic and simplistic arena shooting might feel off-putting, as it's quite easy to bumble along for a while and eventually die without ever quite knowing why. However, spending some time with the game reveals its hidden depths.

The trick is that each stage is only meant to last for a very brief time – get in, blow things up, then get back to the hexagonal stage map. It's an important feature of the game, as your progress through the map determines your power for the next stage, so it's imperative to clear around bosses before you take them on. However, you're up against the clock and each hit takes away precious seconds, and beating bosses is the only way to recover time. The result is that a seemingly brainless shooter actually offers an exciting strategic balance of risk and reward, for those who are willing to find it.







"Harmful Park is a comedy shoot-'em-up in the same manner of Konami's Parodius series"



Harmful Park

■ **DEVELOPER:** SKY THINK SYSTEMS
■ **YEAR:** 1997 ■ **GENRE:** SHOOT-'EM-UP

6 **The PlayStation isn't** as well-recognised for its 2D games as the Saturn, but games like this prove that its non-polygonal offerings shouldn't be discounted. *Harmful Park* is a comedy shoot-'em-up in the same manner as Konami's *Parodius* series. The well-designed stages see you fighting off diverse enemies including gorillas, inflatable dinosaurs and gigantic women. This appears to have been the final game produced by Sky Think Systems, and as a Japan-only release it's not easy to get hold of – original copies regularly sell for over £100. Thankfully, for those of you with access to a Japanese PSN account, it's available digitally on PlayStation platforms for a lower price of ¥600 – less than £5.

iS: Internal Section

■ **DEVELOPER:** POSITRON
■ **YEAR:** 1999 ■ **GENRE:** SHOOT-'EM-UP

5 **The most immediately** striking thing about *iS: Internal Section* is its visuals. While the PlayStation's hardware allowed for diverse approaches to 3D visuals, most developers stuck with the standard texture-mapped polygons – not so *Positron*. The abstract flat-shaded polygon visuals of *Internal Section* allowed the developer to crank up the resolution and frame rate, creating a game that has aged remarkably gracefully. The game itself is a tube-based shooter in the same manner as *Tempest* and *N2O*, with some interesting twists including a selection of 12 unique weapons and boss battles in which you can adjust the size of the tube. It's another Japan-only release, but screen text is predominantly in English so don't worry about the language barrier.





Guardian's Crusade

■ **DEVELOPER:** TAMSOFT
■ **YEAR:** 1998 ■ **GENRE:** RPG

4 ***Guardian's Crusade* is** an RPG that takes aim at a slightly younger age group than most on the PlayStation, but one which keeps you playing thanks to a solid grasp of the genre's fundamentals. The most obvious concession to the younger audience, other than the relatively light tone, is the monster-raising aspect. If you put in the effort, your companion can be moulded into a formidable fighting partner to aid you on your journey. The game is also renowned for its high-quality translation, besting others of its era by managing to retain much of the humour inherent in the original Japanese script.



Kula World

■ **DEVELOPER:** GAME DESIGN SWEDEN AB
■ **YEAR:** 1998 ■ **GENRE:** PUZZLE

3 **This abstract puzzler** is a real gem, and one of the best mental workouts available on the PlayStation. Each stage takes place in a floating structure comprised of interconnected cubes, and your goal is to guide a beach ball around them, in order to collect keys before reaching the exit. This sounds simple, but is made much more complex by the game's convenient physics – rolling over the edge of a cube won't result in an untimely plummet, but instead a reorientation of gravity. This means that each stage has six different floor surfaces and can be approached in a number of different ways, but the area you want to be in will always be tantalisingly difficult to actually reach. With over 150 stages, *Kula World* will keep you occupied for a long time.

Kula World is an uncommon release, meaning that many of the players who were interested in the full game never got to try it. That rarity meant that copies used to change hands for as much as £50, but it's now much easier to obtain thanks to cheap digital re-releases. Even original copies shouldn't set you back more than around £25 now, with US imports coming in even cheaper.

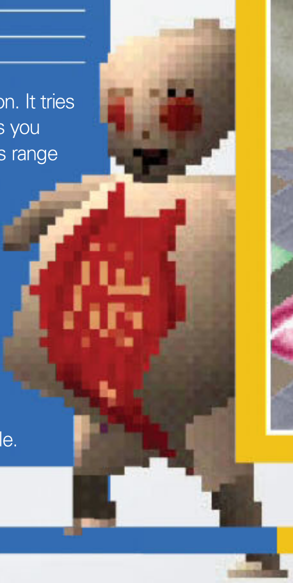




LSD: Dream Emulator

■ **DEVELOPER:** OUTSIDE DIRECTORS COMPANY
■ **YEAR:** 1998 ■ **GENRE:** SIMULATION

2 ***LSD* is one** of the weirdest games on the PlayStation. It tries to simulate the experience of dreaming, and requires you to wander around surreal landscapes. These settings range from realistic historical landscapes to completely abstract dreamscapes, and are populated by characters ranging from humans to ghostly apparitions, animated teddy bears, and more. In any case you'll want to interact with discretion – touching walls and objects will move you to a new environment instantly. *LSD* was a title that exceeded the inaccessibility of most import titles, in that was beyond the reach of most gamers due to its high price – you'd be lucky to find a copy for less than £150. Thankfully, a release on the Japanese PSN has made it more accessible to gamers with a modern console.





No One Can Stop Mr Domino!

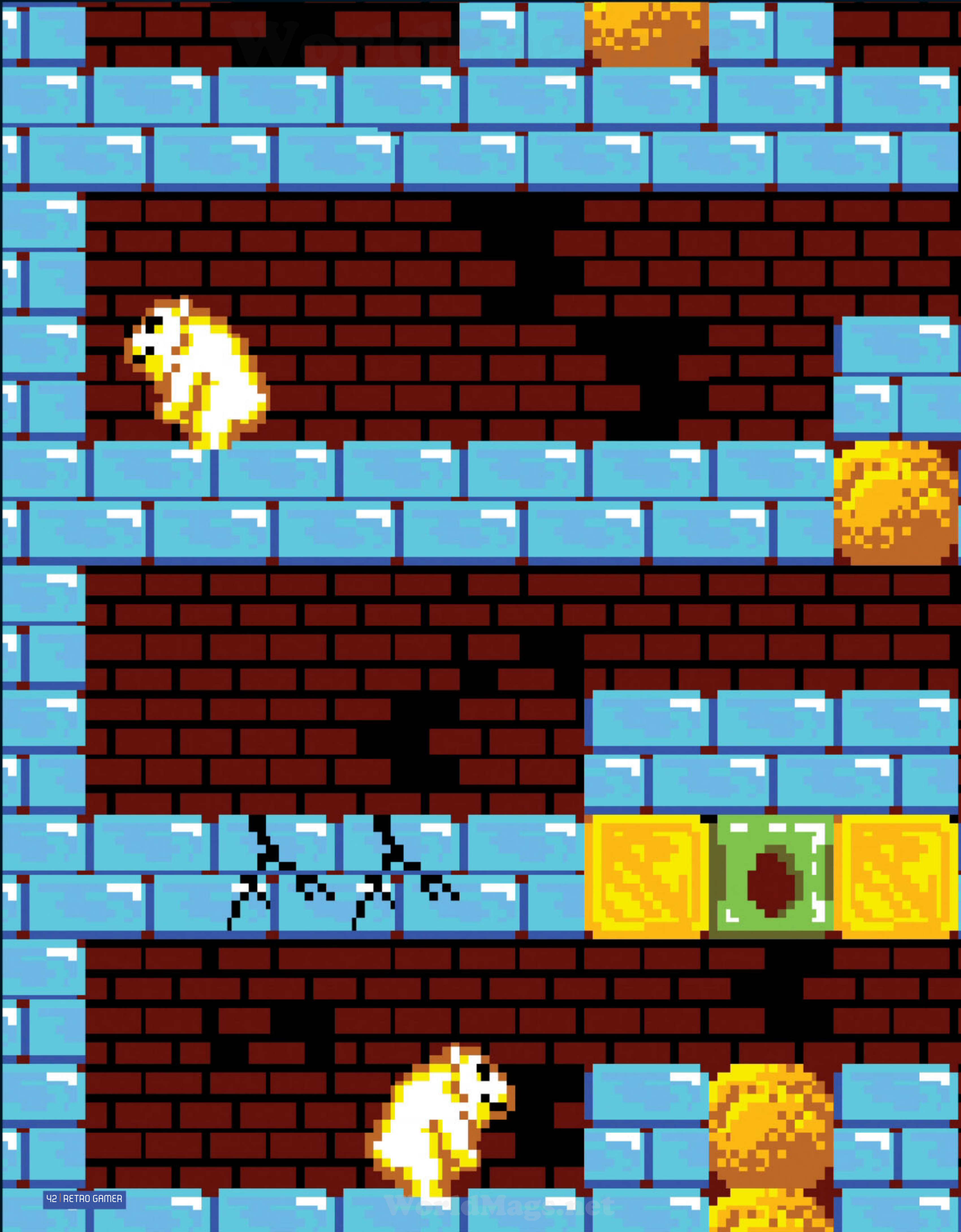
■ **DEVELOPER:** ARTDINK ■ **YEAR:** 1998 ■ **GENRE:** ACTION-PUZZLE

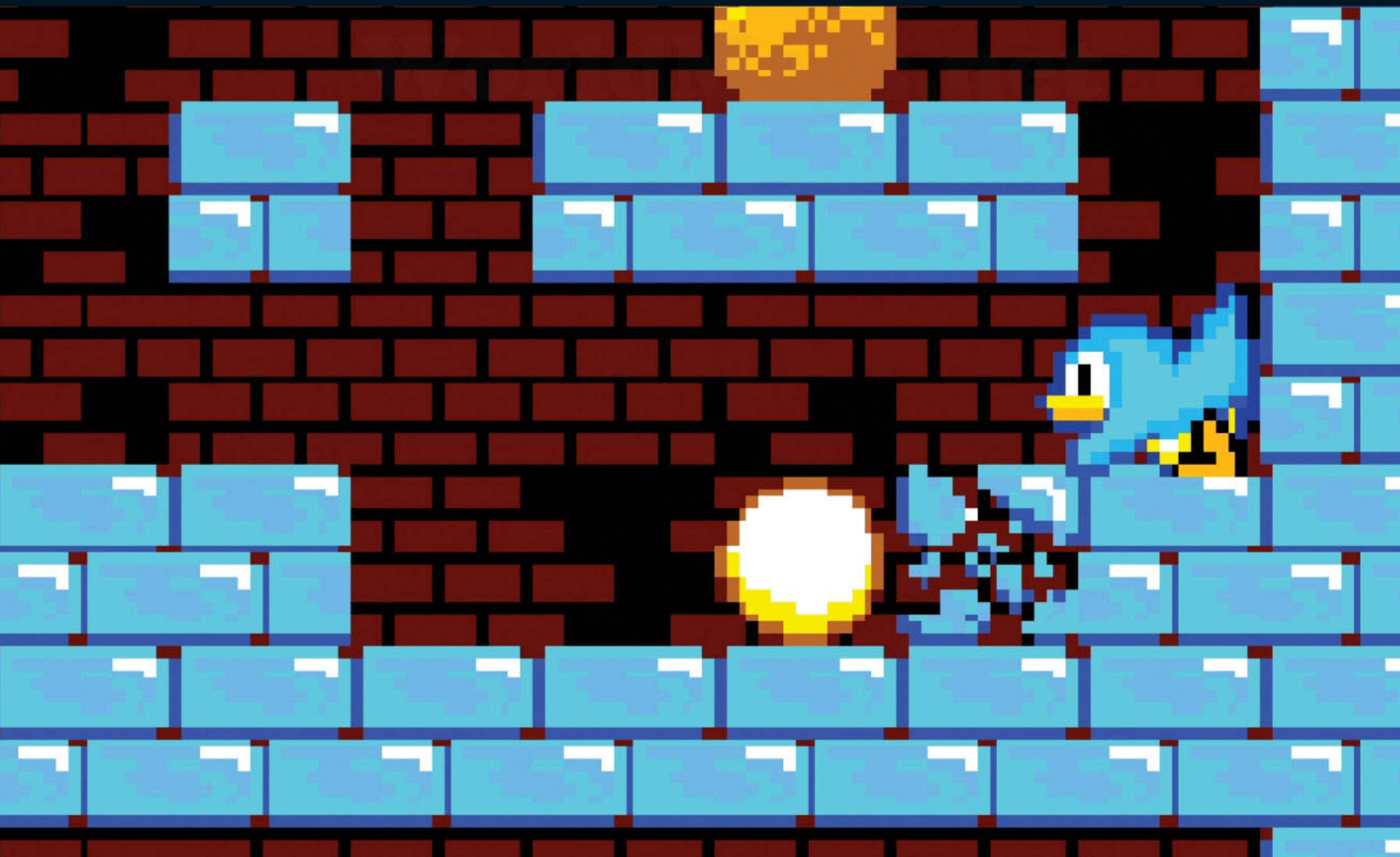
1 **Laying a great** line of dominoes is a tricky job at the best of times – one false move and all your time is wasted. So you've got to feel for poor Mr Domino, our titular hero in this game, who has to do so while avoiding obstacles and laying the dominoes from his own back. Yes indeed, it's another weird one – which is perhaps no surprise, given that Artdink's other game in this list is *Aquanaut's Holiday*.

At its core, *Mr Domino* is a score attack puzzle game – your goal is to lay trails of dominoes leading to trick points while you run a predetermined circuit. When you hit your second lap, you'll be able to knock down the previously-laid dominoes and set off the tricks. If you started your chain from the right place, you can even perform trick combos! Of course, as you try to set up your lines you'll be accosted by cats, vegetables and even the odd sumo wrestler. You also have a limited number of dominoes to work with and strict time limits to adhere to, making this a trickier game than you might imagine from just looking at it.

While the gameplay is perfectly good, much of Mr *Domino*'s appeal comes from just how weird it is. Your protagonist's tricks quickly escalate from knocking down towers of cards to causing a housewife to discover a bomb in her oven, and later causing a meteor strike. While it's all played off as humour, we do wonder how sympathetic this protagonist is really meant to be…







Penguin Land

THE MOST EVOLVED PENGUINS YOU'LL EVER MEET

RETROREVIVAL



» MASTER SYSTEM » SEGA » 1987

I never guessed penguins to be intergalactic space travellers, but after the exploits of the little fellows in *Madagascar* I suppose anything is possible. In addition to being able to fly spaceships, the penguins of *Penguin Land* have evolved so much that their beaks and wings can shatter brick. Despite their highly advanced brains and insanely powerful bills they've been unable to work out a way to safely transport their eggs – quite an evolutionary set back for the spacefaring species.

Still, the penguin's loss is your gain as it allows you to tackle this quirky puzzle game for Sega's 8-bit console. Starting off at the top of a hazard-filled stage, your aim is to dig your way through bricks, avoiding enemies such as polar bears until you reach your space station. Once your egg is safe, your fellow penguins will carry it off screen and you can start the next stage. Despite the evolved state of the penguin pushing it, the egg itself is still paper-thin meaning if it falls further than two blocks it will shatter. Enemies will also destroy the egg if they come into contact with it, meaning you need to work out a safe route through the labyrinth-like and surprisingly lengthy levels. Luckily egg shields, time bonuses and springs all exist to make your task that little bit easier, which is handy, as Sega's game is infuriatingly tough in places.

In fact it's so tough at times you'll quickly fill a swear jar if you blindly rush through it. Take it slow and steady however — timer withstanding — and you'll discover that Sega's clever puzzle game still has a lot to offer. *

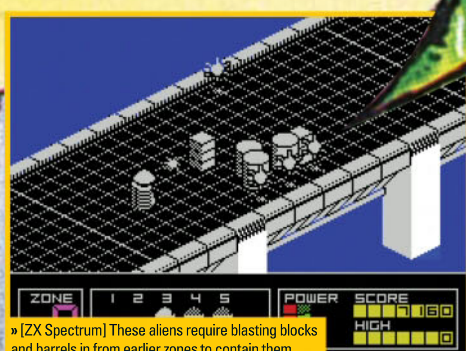
The Making Of

HIGHWAY ENCOUNTER

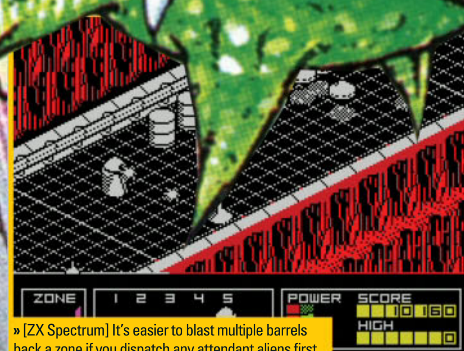
An advance viewing of Ultimate's Knight Lore helped shape Vortex Software's Highway Encounter. Rory Milne discovers how Costa Panayi created his perfect amalgam of shooter and puzzler in isometric form



» [ZX Spectrum] *Highway Encounter's* first level sees the game's Vorton troops fall in behind their commander.



» [ZX Spectrum] These aliens require blasting blocks and barrels in from earlier zones to contain them.



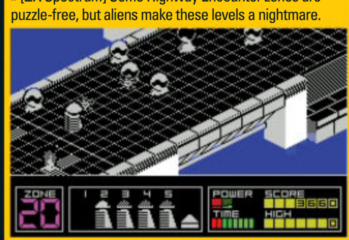
» [ZX Spectrum] It's easier to blast multiple barrels back a zone if you dispatch any attendant aliens first.

Mark Haigh-Hutchinson once wrote about his days coding for Vortex Software making special mention of a trip to tape duplicator Ablex with boss Costa Panayi and their exposure to the freshly mastered *Knight Lore*. Costa's memories of this influential trip have faded, but he does recall Ultimate's title radically changing his approach to 3D game design. "I began exploring ways of creating 3D colour graphics with *Android 2* and continued developing this technique further with *T.L.L.* and *Cyclone*. I don't actually remember being shown *Knight Lore* while visiting Ablex. [But] I can't argue with Mark's description – I think he'd just started working for us at the time so it would have been a memorable experience for him. I do remember that *Knight Lore* introduced a new take on 3D, and I was impressed with the clean graphics. The use of masking helped to produce a very clear 3D image and allowed smooth single pixel movement, although, at the expense of colourful characters because of the Spectrum's limitation of two colours per 8x8 block. Masking was certainly something I would experiment with and use in Highway Encounter."

Sometime after seeing *Knight Lore*, Costa remembers Vortex business partner Luke Andrews and himself transitioning from home to office workers. "We found that stacks of large boxes full of cassette tapes were taking up a great deal of space in Luke's house – not ideal! The derelict docklands of Salford Quays were being revived with grants, and the council encouraged new businesses to enter the area with reduced rates. One of the new business units offered for rent was ideal for our needs."

Following the move, Costa's ideas for Vortex's next game included isometric trucks, a Lasertron weapon and protagonists called Vortons


» [ZX Spectrum] Solving logistical puzzles during firefights is the key to success in Highway Encounter.

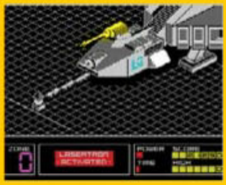

» [ZX Spectrum] Some Highway Encounter zones are puzzle-free, but aliens make these levels a nightmare.

– who would quite coincidentally, resemble Daleks. "I came up with the simple idea of travelling along a very long straight road to deliver a large truck with payload – in 3D of course. My original title was '*Road To Ruin*', but Luke decided this name would be a bad omen! The player would be controlling a sophisticated laser tank upfront to protect [the truck] and to clear the obstacles ahead, [but] this concept proved challenging to develop further at the time. After I presented the initial concept to Luke, we brainstormed and morphed the large tank into a character-block-sized Vorton pushing a Lasertron payload. This allowed for greater manoeuvrability and made the screen action area effectively larger. I started with basic sketches on graph paper and then used a graphics editor to draw them on screen one pixel at a time. I'd written an editor for *T.L.L.* and continued to develop and use it with my later games. With it you could 'cycle' a row of pictures – usually 8x16 pixel blocks – to ensure the rotational movement was fluid. I remember drawing the Vorton pixel-by-pixel directly to the screen and ended up with a shape that could easily be rotated in eight directions whilst maintaining a recognisable form. I didn't think of Daleks at that time, so the idea of licensing them or creating a *Doctor Who* game never occurred to us. Once we had settled upon using the Vorton as the main character, the game was always going to be a combination of shoot-'em-up and puzzle solving. I thought the combination would make the game more interesting."

> **"I remember drawing the Vorton pixel-by-pixel directly to the screen"**
> Costa Panayi creates the Vorton

With *Highway Encounter*'s basic premise and player character in place, Costa opted to tackle the core gameplay, coding and graphics for his game simultaneously. "Much of it was done in parallel. As the gameplay and concept developed, it became easier to visualise and design the graphics and characters. The objectives came first, and the Alien plot grew as work the game progressed. The fabulous science fiction book covers of the Seventies and Eighties inspired the visuals for the game, and the final mothership was greatly influenced by the superb SF art of Chris Foss. The alien forms in the classic Fifties film version of *War Of The Worlds* provided inspiration for the two 'Cyclops' style creatures. ▶

"HIGHWAY ENCOUNTER 101"



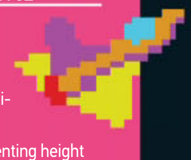
■ Part shooter, part puzzler, *Highway Encounter* consists of 30 static sections of alien-infested isometric highway. Some aliens are vulnerable to your laserfire but others aren't. The highway's centre must be cleared of invulnerable aliens by confining their movement with debris to allow delivery of a weapon designed to destroy the aliens' mothership.

ARMED AND ISOMETRIC

More shooters with a slanted view

ZAXXON

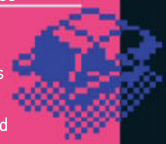
SYSTEM: Arcade YEAR: 1982



■ This earliest of isometric shooters laid much of the groundwork for the sub-genre. Notably, Sega's multi-hued coin-op solved the design challenge of representing height with a clever floating shadow mechanic. *Zaxxon* provides considered gameplay but punishes lapses in concentration.

CRITICAL MASS

SYSTEM: Various YEAR: 1985



■ Like *Bosconian*, Durell's *Critical Mass* uses a visual set-up where the backgrounds move while the player's rotating ship remains anchored centre-screen. *Critical Mass* is more time-trial than straight shooter, though, with careless blasting and collisions costing precious energy.

GLIDER RIDER

SYSTEM: VariousYEAR: 1986



■ Awesomely, *Glider Rider* lets you ride a motorbike that can change into an armed hang-glider! It's a silly but brilliant mechanic, which sees you disrupting ground-to-air lasers by riding into them before taking to the temporarily undefended skies to bomb nuclear reactors.

BUBBLER

SYSTEM: Various YEAR: 1987



■ The much-maligned *Bubbler* deserves a second look. Admittedly, its controls are hardly intuitive, but once you adapt to them your reward is a sophisticated isometric platformer with a subtle shoot-'em-up element. It's also one of Ultimate's most visually impressive games.

AMAUROTE

SYSTEM: Various YEAR: 1987



■ Granted, *Amaurote* delivers more on style than substance but only because the game is so very stylish. The title does have substance, though, and successfully navigating its beautiful alien worlds and dispatching giant insects with bouncing bombs requires genuine skill.

Most of the game was written from scratch. I used some routines from earlier games such as the start screen and randomisation code for alien movement but most had to be heavily modified. It was all quite primitive at the time. I used a Spectrum with extra memory sitting inside a 3rd party keyboard. Everything was stored on Microdrives, which were notoriously unreliable. I used an assembler to code the game, but can't remember much more than that."

Costa's evolving gameplay combined alien blasting with logistical puzzles based around clearing a central path along an alien-infested highway, which required intensive fine-tuning to implement. "I used 35 sheets of Protek Sinclair ZX graph paper marked out with a blank scene for each screen of the diagonal road. We experimented with bits of paper representing the characters, positioning them and re-positioning them until we were happy with the structure of each scene and there was enough variety to keep the player guessing. With the sheets marked up, it was then a laborious task entering the X and Y coordinates for each item, as well as the direction of initial motion for animated objects. Luke used to spend hours testing the gameplay while I was writing code, and using his feedback I re-positioned many items to ensure the game flowed nicely."


» [ZX Spectrum] Vorton replacements travel down the highway's centre so objects have to be blasted aside.



IN THE KNOW

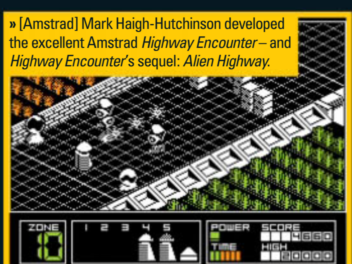
» **PUBLISHER:** VORTEX SOFTWARE
» **DEVELOPER:** VORTEX SOFTWARE
» **RELEASED:** 1985
» **PLATFORM:** VARIOUS
» **GENRE:** SHOOTER / PUZZLER

Mechanically, *Highway Encounter*'s player character would differ greatly from its isometric contemporaries in that the Vorton would build up speed over distance, but this innovation would also prove problematic. "It became clear that to travel reasonably quickly along the road it was necessary to incrementally step up the pixel movement per cycle, so that at the fastest rate the Vorton would be moving several pixels per cycle. This introduced problems such as the risk of jumping through the corner of a solid object without registering impact, or ending up being buried within an object. The coding had to allow for numerous eventualities and took many hours to perfect."

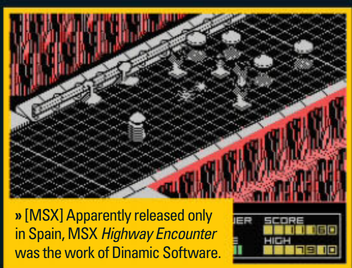
Another of Costa's innovations would see the player controlling one Vorton while commanding four in-game replacements rather than having five sequential lives. "When we moved away from the idea of tanks and trucks going down the road, the concept of a manoeuvrable Vorton added lots of flexibility to the game design. I tried to think of a good way to introduce the next life when the Vorton was destroyed without sending you back to the beginning or magically introducing a new one. During a brainstorming session, the concept of being able to control all your lives emerged and with it, the idea of being able to position them along the road as you progressed and the need to protect them during the journey became a natural progression."

Using masking to give *Highway Encounter*'s visuals depth and deciding the game's ending would come about less naturally, however, with masking giving Costa as serious a challenge as his title's near-complete gameplay would ultimately give players. "Masked graphics with pixel movement was a new area for me, and it turned out to be a real learning curve. I experimented with several different ways of achieving this, but making it work was not the only issue. It had to be accomplished efficiently otherwise the game would stutter while the Z80 processor was crunching the code. There was a danger that the number of visible moving objects would have to be restricted to maintain a reasonable game speed. This was true with a lot of the core game routines. I'd explore ways to streamline them in order to reduce the number of processing steps. Sometimes a totally different approach to the problem was required, so the routine would have to be re-written from scratch. It was tough trying to get the gameplay right, and Luke spent many hours playing, testing and giving feedback. We became very proficient at playing the game during testing and

> **"It was tough trying to get the gameplay right, and Luke spent many hours giving feedback"**
> Costa Panayi on the benefits of not working alone


» [Amstrad] Mark Haigh-Hutchinson developed the excellent Amstrad *Highway Encounter* – and *Highway Encounter*'s sequel: *Alien Highway*.


» [C64] The C64 version of *Highway Encounter* was outsourced to Gremlin Graphics and was well received.


» [MSX] Apparently released only in Spain, MSX *Highway Encounter* was the work of Dinamic Software.


» [Atari ST] In 2010, Costa Panayi allowed free of charge distribution of Vortex's unpublished Atari ST *Highway Encounter*.

CLASSIC COSTA

More standout Costa Panayi titles to discover



ANDROID 2

SYSTEM: Spectrum
YEAR: 1983

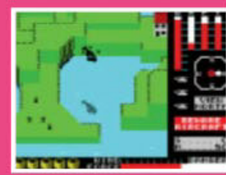
■ Costa's debut title *Android 1* took inspiration from Stern's classic coin-op Berzerk, but his more technically advanced follow-up has more in common with *Tutankham*. Unlike Konami's tomb-raider, however, *Android 2* favours sprawling bas-relief mazes, which require a stealthy approach as much as lightning-fast reflexes.



T.L.L.

SYSTEM: Spectrum
YEAR: 1984

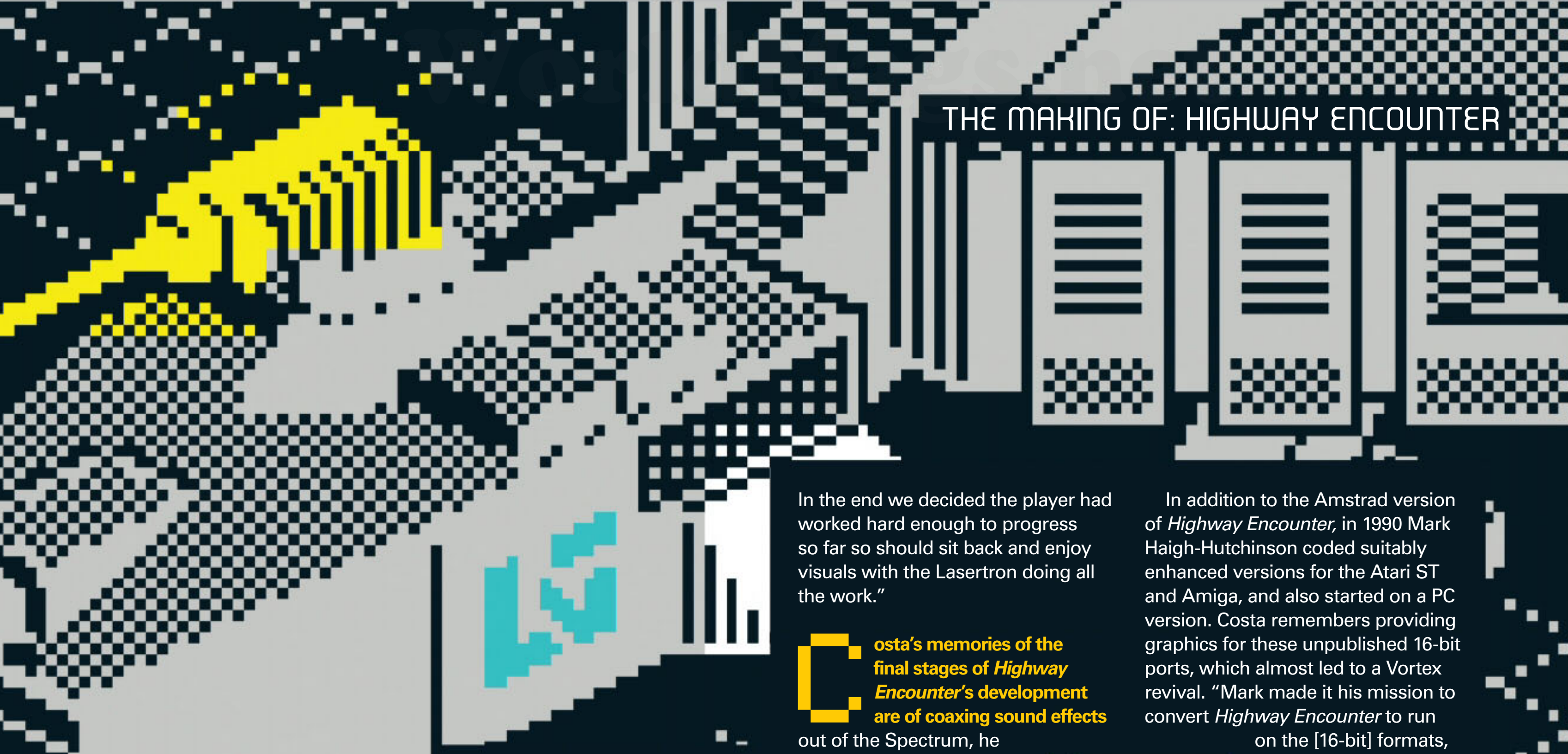
■ Although graphically evolved from *Android 2*, *T.L.L.* offers objectives and mechanics that couldn't be more different than its predecessor's. This collect-a-thon demands precise use of the game's controls in both the horizontal and vertical planes – much like *Zaxxon* – and sets strict time and fuel limits for each brightly coloured level.



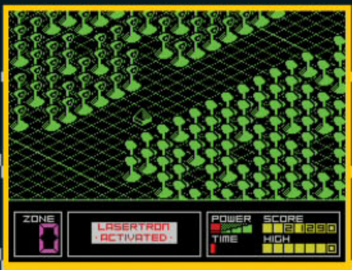
CYCLONE

SYSTEM: Spectrum
YEAR: 1985

■ More spiritual successor to *T.L.L.* than sequel, the destructive force of the eponymous cyclone means its up to you to evacuate an island's inhabitants as well as deliver vital medical supplies. Close encounters with the cyclone demands quick landings and the need for constant refuelling makes island hopping risky.



as a result we could consistently complete it well within the time limit. Looking back now, it does seem a bit harsh to run out of time just before the end even though you have solved most of the puzzles and kept the bulk of your lives intact. The main issue with the ending was that we didn't want it to be an anti-climax when you got there. We looked at various scenarios such as finding a giant alien Egyptian pyramid, a large flying saucer protected by sentries or have the Vorton join forces with the Lasertron to destroy masses of aliens in a final grand shoot-'em-up. In the end we decided the player had worked hard enough to progress so far so should sit back and enjoy visuals with the Lasertron doing all the work."



» [ZX Spectrum] Once activated, *Highway Encounter's* aliens are powerless to stop the Lasertron's journey towards their mothership.

Costa's memories of the final stages of *Highway Encounter's* development are of coaxing sound effects out of the Spectrum, he also remembers happily reading the reviews of his game and gladly leaving its conversion to others. "Sound effects developed for earlier games were tweaked to suit *Highway Encounter.* I usually added sound in the latter stages of game development. It was a big problem with the Spectrum because playing sound tied up the processor so the game ground to a halt every time a sound was triggered. The only solution I found was to create sound effects using lots of very short 'blips' so that the effect on gameplay was minimised. I wrote some code to pseudo-randomise the pitch of the blips, and by entering a 'seed number' different sound effects were created. I think [*Highway Encounter*] took around nine months from conception to publishing. It certainly felt like a special game when I was writing it and so we were really pleased when it received very positive reviews. Gremlin Graphics handled the conversion and marketing of the C64 version. I never really liked the C64 – I thought the graphics tended to look 'woolly', although the sound effects were much better. I suspect [the MSX version] was something that Luke must have arranged with Gremlin, but I have no recollection of it. Mark was our Amstrad CPC expert. He converted *Highway Encounter* to run on it with minimal help from me and I thought he did a brilliant job."

In addition to the Amstrad version of *Highway Encounter,* in 1990 Mark Haigh-Hutchinson coded suitably enhanced versions for the Atari ST and Amiga, and also started on a PC version. Costa remembers providing graphics for these unpublished 16-bit ports, which almost led to a Vortex revival. "Mark made it his mission to convert *Highway Encounter* to run on the [16-bit] formats, and he did so after we all left Vortex to do other things. [I have] memories of working on the graphics, especially the fancy border and adding colour to the creatures – I remember adding the red to the 'Mouth' creatures. We looked at re-starting Vortex, but circumstances at the time meant we did not continue."

When asked if he would change anything about his isometric classic, Costa suggests a couple of alterations before expressing his satisfaction with Highway Encounter's continued popularity. "Looking back, it would have been great to have title music and maybe we should have commissioned someone to do it. I'd remove the time constraint. It's a bit mean when someone has fought their way to the final screens only to run out of time! *Highway Encounter* is my favourite game, so I am thrilled that it continues to bring pleasure to people around the world." ★



DEVELOPER HIGHLIGHTS

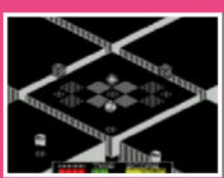
ANDROID TWO
SYSTEM: VARIOUS
YEAR: 1983

T.L.L.
SYSTEM: VARIOUS
YEAR: 1984

REVOLUTION (PICTURED)
SYSTEM: SPECTRUM, AMSTRAD
YEAR: 1986



» [ZX Spectrum] If this Vorton survives being ambushed then a deceptively difficult puzzle awaits behind him.



REVOLUTION
SYSTEM: Spectrum
YEAR: 1986

■ Although *Revolution* requires timing, hand-eye co-ordination and problem-solving, the game provides a different kind of isometric puzzles to those found in *Highway Encounter.* The stiff challenge Costa sets is to bounce a ball around playfields, changing grey cubes into white cubes before they revert back to grey.



DEFLEKTOR
SYSTEM: Spectrum, Amstrad YEAR: 1987

■ Costa dispensed with arcade sensibilities when developing *Deflektor,* instead preferring to create a pure puzzle game. His infuriating but addictive creation sees you guiding a laser via pivoted mirrors, which can be rotated through 360°, in an attempt to blast objects and complete circuits without reflecting the laser back on itself.



H.A.T.E.
SYSTEM: Spectrum, Amstrad YEAR: 1989

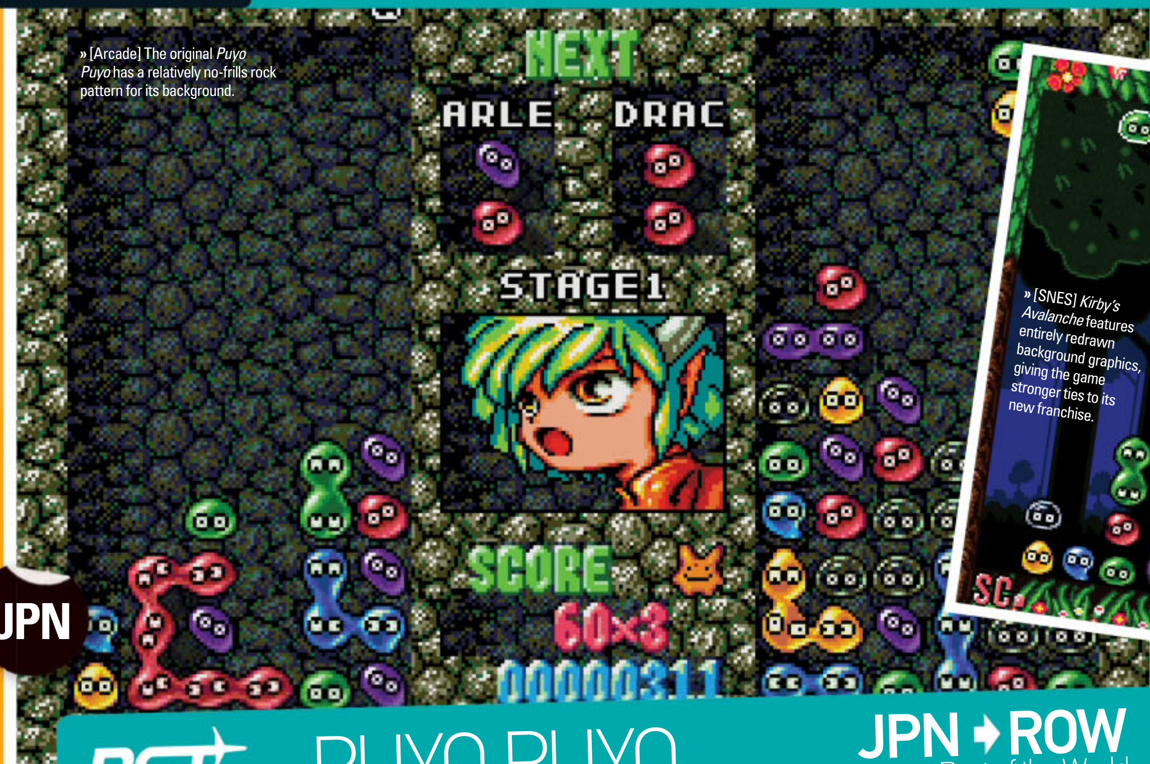
■ Viewed as the unpretentious isometric shooter that Costa clearly meant it to be, *H.A.T.E.* fulfils its remit perfectly. It boasts polished presentation, undulating hills as well as vicious enemy AI and collectable life-restoring plasma cells. The gameplay alternates between piloting a starship and tank, which helps add variety to proceedings.

RGT

Retro Gamer Travels

LOST IN TRANSLATION

How the rest of the world experienced your favourite games



» [Arcade] The original *Puyo Puyo* has a relatively no-frills rock pattern for its background.

JPN



ROW

» [SNES] *Kirby's Avalanche* features entirely redrawn background graphics, giving the game stronger ties to its new franchise.

RGT

PUYO PUYO

JPN → ROW
Japan → Rest of the World

PUYO PUYO
Departing: 1991

FORMAT
Various

DEVELOPER
Compile

YEAR
1991

ORIGIN
Japan

LOCALISED FOR
Rest of the world

REASONS
Commercial

■ *Puyo Puyo* is a puzzle series with some history behind it, but much of that history was hidden away in its early years thanks to localisation decisions. The first *Puyo Puyo* game was originally released for the MSX2 and quickly grew in popularity following an arcade release, before being converted to a wide variety of home systems. The game is actually something of a spin-off, as its characters – including the Puyos themselves – originate from Compile's RPG series *Madou Monogatari*. The arcade release received a straight English translation, but the home conversions would receive major changes.

Sega's effort was first, replacing the *Madou Monogatari* cast with characters from the *Adventures Of Sonic The Hedgehog* cartoon to create *Dr Robotnik's Mean Bean Machine*. This made it something of a unique product, in that it was a spin-off of a spin-off, created by localising an entirely unrelated spin-off! However, the changes were actually relatively minimal – while Arle, Carbuncle and their friends gave way to Scratch, Grounder and Coconuts, the edits amounted to little more than redrawn character sprites, new dialogue and a new introduction. The Mega Drive version was released in 1993 and has become a mainstay of retro compilations, with Master System and Game Gear versions following later.

Next up was Nintendo, which altered *Super Puyo Puyo* into a *Kirby* game. This was also covered by localisation differences, with the US release titled *Kirby's Avalanche* and PAL regions receiving *Kirby's Ghost Trap*. Just like in *Mean Bean Machine*, character sprites and cutscenes were altered, giving Kirby a fairly large amount of unusually belligerent dialogue. However, the graphical edits went much further than in Sega's game, as the in-game backgrounds were redrawn to feature classic *Kirby* stages. This version released only on the SNES, and is available on the Wii Virtual Console service.

A later *Puyo Puyo* release for the PC was retitled *Qwirks* by Spectrum Holobyte. *Puyo Puyo* would finally reappear in its original form on the Neo Geo Pocket Color in 1999, using the English title *Puyo Pop* – one which it has retained ever since. However, if the Game Gear version is anything to go by, there might have been another plan for the English title prior to the spate of localisations – when inserted into a non-Japanese system, the title screen reads *Puzlow Kids*.









RGT COMMANDO JPN ➔ GRM

Japan ➔ Germany

COMMANDO
Departing: 1985

FORMAT
Arcade

DEVELOPER
Capcom

YEAR
1985

ORIGIN
Japan

LOCALISED FOR
Germany

REASONS
Violence

ECONOMY

■ While regulations have been relaxed somewhat now, Germany has historically been very touchy about the depiction of people killing each other in videogames. You could commit all kinds of horrific acts of violence against non-human enemies, but the second man turns on man, that's it – game over. This left many developers with some major issues, as you kill people in quite a lot of popular games, including Capcom's *Commando*. However, the company wanted to release the game in the former West Germany, so edits were required.

The first thing that had to go was any indication that the soldiers were human. Capcom re-titled the release *Space Invasion*, evidently unconcerned with any potential confusion with Taito's monumental arcade hit of a similar name. Then, all of the sprites except the player sprite were edited to hide their facial features and make them look rather less human – it's hard to tell what they are now, as they could be robots or aliens. That ambiguity was enough for Capcom and the German public, as *Space Invasion* doesn't appear to have caused any controversy. The later home versions retained the name change and sprite edits – amusingly, the C64 makes the alien sprite look like the Michelin Man



» [Arcade] *Space Invasion*'s sprites don't look tremendously different from the international *Commando* ones, really.

RGT KATO-CHAN & KEN-CHAN JPN ➔ USA

Japan ➔ USA

KATO-CHAN & KEN-CHAN
Departing: 1985

FORMAT
PC Engine

DEVELOPER
Hudson Soft

YEAR
1987

ORIGIN
Japan

LOCALISED FOR
USA

REASONS
Commercial

ECONOMY

■ As far as platformers go, *Kato-Chan & Ken-Chan* is a relatively mediocre take on the *Wonder Boy* formula, but as a history piece it's a fascinating look into how NEC altered PC Engine software for the US Turbografx-16 market. The game stars Japanese comedians Ken Shimura and Cha Kato, who are best known for hosting a home video show that would go on to inspire countless imitators worldwide.

NEC brought the game to the US to bolster its software line-up, but made a number of graphical edits. The celebrity stars of the game wouldn't have been relevant to the new audience, so they were understandably redrawn into the new titular protagonists. Thanks to NEC's concern over parental reactions and general good taste, they're rather cleaner chaps than their Japanese counterpart – Kato and Ken employ fart attacks, have no qualms about public urination and will even take a dump in the woods if the mood takes them. Their American cousins were more prone to attack with spray cans, changing the projectile from rear-firing to front-firing in the process. This at least made sense – the edits made to the rest of the toilet humour were completely nonsensical.



» [PC Engine] Kato is red in the face from straining here, keeping up the classy toilet humour.

» [PC Engine] JJ is… hiding in the bushes, dressed as an animal while holding a spray can?





WELCOME TO COMBAT SCHOOL

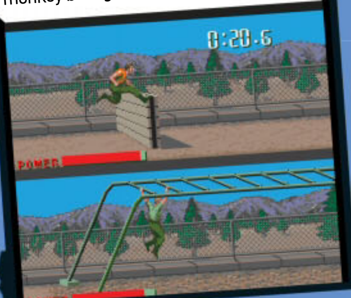
Darran Jones discovers what happens when you take the DNA of Track & Field and splice it with the United States Marine Corps

THE EVENTS OF COMBAT SCHOOL

STEP 1:

Obstacle Course

Race through this hazard-strewn course as quickly as possible. Don't let Joe get too close to you, as he'll knock you off those monkey bars given half the chance.





STEP 2:

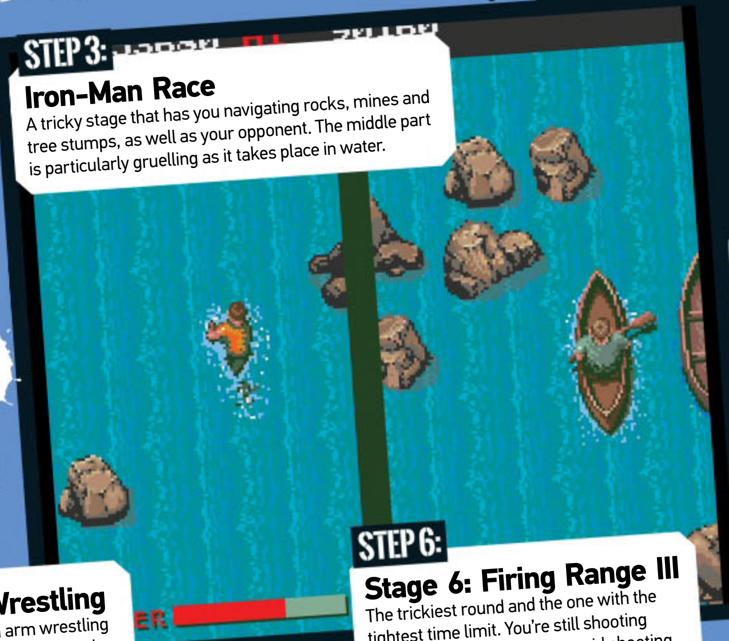
Firing Range I

The first weapons test requires you to simply shoot rows of targets. If you can hit every single one you'll receive additional bonus points.

STEP 3:

Iron-Man Race

A tricky stage that has you navigating rocks, mines and tree stumps, as well as your opponent. The middle part is particularly gruelling as it takes place in water.



STEP 4:

Firing Range II

This time you're gunning down robot drones. They approach in a variety of interesting waves and the next wave won't start until the last drone is shot.



STEP 5:

Stage 5: Arm Wrestling

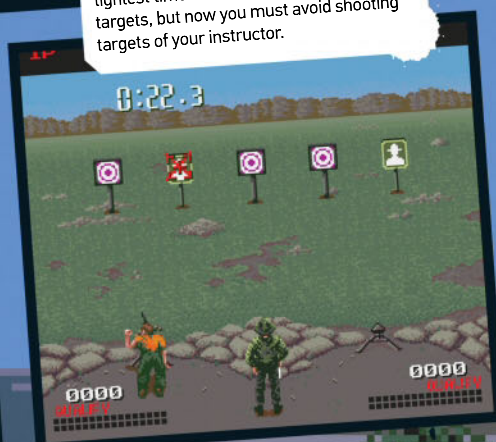
While speed is important in arm wrestling it's also critical that you maintain a good rhythm as well. Get it wrong and you'll quickly get overpowered by Joe.



STEP 6:

Stage 6: Firing Range III

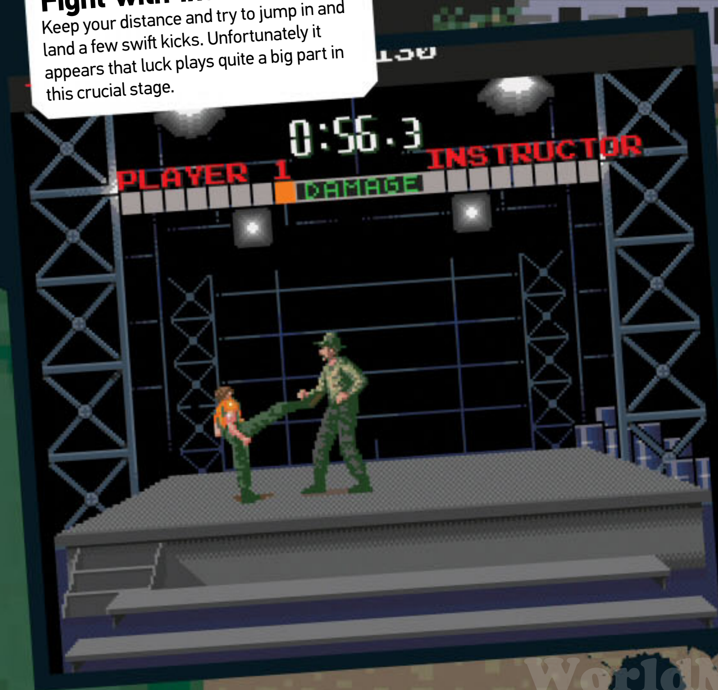
The trickiest round and the one with the tightest time limit. You're still shooting targets, but now you must avoid shooting targets of your instructor.



STEP 7:

Fight with instructor

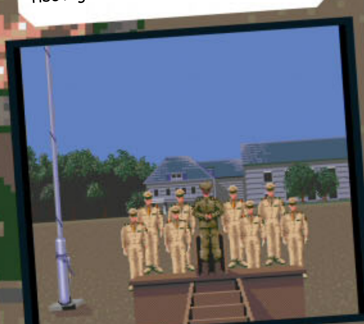
Keep your distance and try to jump in and land a few swift kicks. Unfortunately it appears that luck plays quite a big part in this crucial stage.



STEP 8:

Congratulations

Hooray, you've graduated. You can take a little breather and watch the recruits thrown their berets in the air. And then watch in amazement as they rise higher and higher and higher…





STEP 9:

???

The final stage is a nightmare. Enemies throw knives and molotov cocktails that will kill you on impact. Reach the end and you'll have a one-on-one fight with the terrorist leader.

The term 'button masher' is often used to describe any gamer who will mash buttons and still get a desired result. While the term is used in beat-'em-up circles, in the Eighties Konami was able to turn this gameplay technique into an art form.

The release of *Track & Field* in 1983 revolved around the player routinely mashing buttons in order to participate in various sport events, from throwing a javelin to taking part in a frantic hurdles dash. The concept proved incredibly popular for Konami, and a string of sequels and copycats quickly followed. While the frantic-paced gameplay was an extremely big hit with gamers, it wasn't welcomed with the same grace by arcade vendors, as the constant bashing would lead to broken buttons, keyboards and joysticks.

In 1987, Konami took its popular sports template and relocated the action to a military academy, thrusting the player into the shoes of Nick, a brown-haired recruit who was attempting to make it as a United States Marine. The end result was *Combat School*, a slickly presented arcade bash-a-thon that took many of the core concepts of Konami's popular sports games and delivered them in a whole new way.

Well, to be fair, bash-a-thon, while not being a proper term, isn't really correct. For you see, *Combat School* started off life as a trackball-based game. While this allowed you to spin the ball incredibly fast in order to build up stamina, it also meant that spinning too vigorously could result in the skin on the palm of your hand getting trapped. Ouch! Later models would replace the trackball and action buttons with a traditional joystick setup, but we'd argue that the trackball version is the one that's most familiar to players.

As with *Track & Field* and *Hyper Sports*, *Combat School* boasted a series of structured events, only allowing progress to the next stage if you completed the required goals – often in very tight time limits. Things kicked off on the obstacle course, a gruelling stamina test that saw you jumping over walls and tackling a large set of monkey bars. The screen is split in two here, with Nick's competitor, Joe being controlled by either the computer or a human opponent. In addition to creating a good rhythm while running, timing was also critical. Miss-time a jump for example and you'd take longer to clear it, or worse, slam against it – falling to the ground and losing critical seconds in the process. The second course was a firing range, the first of three in fact, and it was here that you really appreciated the track ball that Konami had included. Targets pop up haphazardly around the range, requiring lightning-fast reflexes if you aim to take down each one you receive an additional bonus. As we've already mentioned the firing range was featured three times, on stages two, four and six, but to be fair to Konami, each event is notably different, requiring you to be skillful with timed shots or simply take down as many enemies as quickly as possible.

Stage three was another competition against Joe, this time in a gruelling Iron-Man race. Utilising a nifty overhead view, the aim was to clear rocks, mines and take a treacherous swim through log-strewn waters. It's possible to jump into a canoe and make the final stretch a little easier to navigate, but bear in mind that a collision with either Joe or an inanimate object would knock you into the drink.

Round five had Joe and Nick competing directly arm-to-arm in a classic armwrestling match. It's a bugger to pull off if you don't know the technique, as Joe appears to have received training from Sylvester Stallone (that's right, we've thrown in an *Over The Top* reference). Despite its toughness,

» [Arcade] There's no love lost in *Combat School*. Play dirty and play to win.

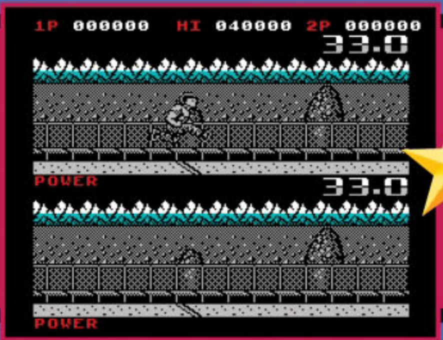




» [Arcade] Perform well and you'll get bonus points, and we all know what points make…

COIN-OP CAPERS

There were only a handful of Combat School conversions, but they were all pretty sweet…







★ ZX Spectrum

The most impressive aspect of Ocean's conversions is that every level has been squeezed into them. The Spectrum version impresses thanks to its large, well-defined sprites, little to no attribute clash and a decent pace. Like the other tape versions it's a multiload event, although this was rectified for the 128k version of the game. The 128k outing also has some truly fantastic tunes that play during each stage too, making it the definitive version of the game. Both versions are highly impressive, easily capturing the competitive nature of the arcade original.

★ Amstrad CPC

James Higgins's CPC conversion is not a quick and easy Spectrum port. The CPC's colour palette is put to good use with vivid colours, the animation is extremely slick and even the scrolling isn't terrible. The firing ranges don't feel as responsive as the other versions, but they're still playable. Perhaps the biggest issue that separates the Amstrad version from its peers is that while it caters for two players, you have to take it in turns, which kills the competitive factor of the arcade original. It's arguably the best looking version, but the tape version is another irritating multiload.

★ Commodore 64

The C64's soundtrack is superb, with the loading screen kicking off with an excellent Martin Galway remix of *I Want To Be Your Drill Instructor*. The game itself is also of a very high standard. The visuals are a little murkier than the other versions, but still manage to impress. Indeed, in some ways it's actually better, complementing the atmosphere of the arcade original. The tape version is another annoying multiload, but the high quality of the audio, tight, responsive controls and all-important addition of the two-player just about makes it our favourite version of the game.



» [Arcade] Fail by a few seconds or hits and you'll be able to redeem yourself in this punishing bonus stage.

it's one of the most memorable sections of the game thanks to the excellent huge portrayals of Nick and Joe as they battle for arm-bulging dominance. The final of the seven rounds was a battle with your instructor and it's something of a let down. Due to the trackball controls, you're limited to a meagre number of moves, which makes the drill sergeant a real pain to beat. Beat him you eventually will though and it's then that your true training begins. After a closing ceremony featuring the sort of American Flag tribute that would make Michael Bay weweep, there's one final mission. And god it's difficult.

Despite being fresh from Marine training, young Nick is considered just the man to rescue the President from a cabal of terrorists. Although half of his training consisted of handling various firearms, Nick has to attempt his rescue with nothing more than high kicks and a natty beret. It's basically a more rubbish and harder version of Irem's *Kung-Fu Master*. It's a brutal end to the game, more so when you realise that a single hit from most weapons will kill you instantly.

Ignoring *Combat School*'s insane final stage, the game proved popular, mainly due to it offering an instant adrenalin rush whenever you played it. While *Combat School* was simple to play, it's filled with cool little touches that would pull you back for another quick play. Failing an event didn't necessarily mean game over, as you might be able to take part in a brutal chin-ups penalty stage that would offer a slim chance to get through to the next stage. The atmosphere was great as well, with the harsh drill instructor constantly barking sound bites at you, while the gritty colour scheme and graphics perfectly captured your bleak training environment.

Interestingly, *Combat School* was only ported to a small variety of home computers back in the day, including Commodore 64, ZX Spectrum, and Amstrad CPC. Annoyingly, the tape versions were multiload, but disk versions typically loaded everything in one go. All three conversions were solid though, meaning you could experience the challenging gameplay in the comfort of your own armchair. ★

» [Arcade] You'll need insane ninja skills to see this screen. We managed it by cheating, but don't tell anyone.



JAMES HIGGINS

We speak to the coder behind the ace Amstrad conversion



How did you come to work on *Combat School*?
I'd been doing some freelance projects for Ocean Software for the French home computer range by Thompson (M05, T07-70, T09) but had originally approached Gary Bracey as an Amstrad CPC programmer. He offered me the CS gig, but wanted me to work in the office in Manchester, but as a contractor still. I agreed readily as the bedroom coder thing was getting a little old. So – I moved to Manchester and spent the next three months living in a B&B in Chorlton-Cum-Hardy and working at 6 Central Street squeezed between Mike Lamb and Ronny Fowles.

Did you have access to the original source code?
No – we had an arcade machine from which a video was captured and used for reference. We could play the game any time we needed to clarify some details when needed. For the most part these were less arcade conversions and more arcade impressions…

Why wasn't the Amstrad version a straight Spectrum port?
Ocean actually did very few internal straight ports at that time. Almost all of the big titles of the day had individual coders – *Renegade* and *Gryzor* being two notable examples. Eventually coders caught on to the fact that they could get two bonuses for pretty much the exact same code and the z80 coders handled both platforms and occasionally others. MSX for example.

How long did *Combat School* take to create and how many of you worked on it?
I believe it took about 3 months. Me on the Amstrad with some help from Mike Lamb and Ronnie Fowles doing the art on both. Not sure if anyone helped him. It was a long time ago now.

What was the biggest technical challenge you faced whilst working on *Combat School*?
It was mostly about getting it done on time. Fortunately Mike Lamb was steaming ahead and helped out with the last couple of events or I might still be working on it. I'm not sure why I was moving slow – I was used to working fast. In all my previous titles I was responsible for organizing the art – so perhaps working in a team for the first time was causing me some issues. Again, it was a long time ago now – so my memory is hazy.

How do you think your conversion compares to the other 8-bit versions of the time?
At the time I thought poorly. One I needed help to finish it and two – it was the first time I'd really seen what a C64 was capable of.

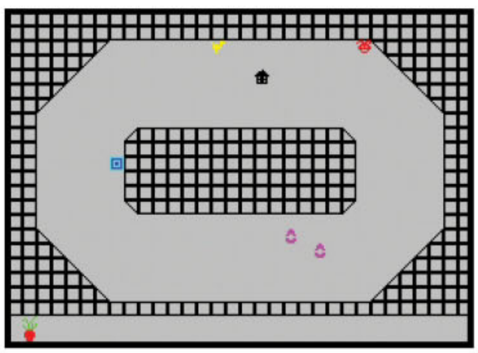
From the Archives

PI-MAN, PERTWEE AND PRIZES: AN AUTOMATA UK RETROSPECTIVE

We feel that it is safe to state that there was no other Eighties games company quite like the innovative, yet controversial Automata. Graeme Mason speaks to the magnificent Mel Croucher, creator of the PiMan's software house...

Few software houses from the Eighties proved to be as interesting, iconoclastic or as, well, odd as Automata UK. And it's a tale that starts with an anarchic and sociopathic hand puppet. "I received my first games machine aged seven," begins Mel Croucher, his eyes still holding that mischievous glint and a shock of wavy hair now lending him a slightly insane evil scientist look. "It was a Sooty xylophone. It played a number of banal tunes so I reprogrammed it." Potentially lethal lead-painted toys aside, Mel soon progressed to making punch card software for an 88-key Victorian Pianola. "And by the time they let me loose on a giant valve computer in the late Sixties, I knew that these machines had been put on Earth to facilitate fun," he smiles. When Mel used this early computer to perform the hugely important task of beeping *Twinkle Twinkle Little Star* in sync with a flashing light bulb, his computer programming teacher duly emphasised the serious nature of the course. As a result, an alternative career beckoned for the rebellious young man. "I was site architect to an autocrat with a beard named Sheikh Rashid bin Al Maktoum," explains Mel wistfully, "who was the ruler of a desert backwater called Dubai." When his ennui became too much even for sand-based architecture, Mel returned to the UK. Fortunately the Sheikh had paid him enough cash to allow him to quit and start his own company back home.

On the 19th November (coincidentally Mel's birthday), 1977, Automata UK was formed, making it most likely the first major software house in the UK. As with many such subsequent companies in the early Eighties, Mel initially ran Automata from his own home. "I did the whole thing out of our spare bedroom, which understandably pissed off my wife when things began to hot up," he grimaces. As to it being the first software house? "I'm not sure, but it was probably the first one registered as a properly structured corporate entity, which is bonkers because I hate corporates. But then I was a bit of a prick in those days." Moving swiftly on, we asked Mel about Automata's first game. Given this was the Seventies, before software shops and even mail order software, it was suitably different from the way games developed in the Eighties. He reveals, "It was a series of prize quests broadcast via local radio, which was the only way I had to reach an audience." The concept was innovative, if a little naïve. The quests would be broadcast and computer owners up and down the land would theoretically be



» [ZX Spectrum] Jas Austin's *Bunny*, the veteran coder's first game.

THE LADY SINCLIVE



"I knew nothing about computer games," admits Carol Ann Wright, aka the Lady Claire Sinclive, who was the last of several secretaries employed by Automata. In fact her role greatly exceeded her title. "During my interview they said one of my duties would be to 'sort' the accounts. It wasn't as straightforward as it sounded – they had no accounts!" Recognising a kindred spirit (and perhaps a valuable employee), Mel and Christian persuaded the reluctant Carol Ann to join them. Other than 'sorting' the accounts, an even more valuable role she took on was the PiManiac's fan club, the PiMan Bugle. "I wrote an agony column for it, it had cartoons, adverts and, of course, it was bright pink. I also received many letters and even some proposals of marriage!" Carol Ann has a hundred more stories but sadly we lack the space, so we'll leave with her thoughts on the men in charge. "Christian was the clown, a loveable rogue," she recalls fondly, "and would always tell it as it was. I don't think he realised sometimes that the truth wasn't what people wanted to hear. And Mel – what can I say about this brilliant man. Full of ideas and born much too early for most of the human race. He changed my life in many ways, gave me confidence and belief in myself. The whole Automata experience was one of the most influential in my whole life. It brought me alive."



» Automata, 1980: from left to right, Robin Evans, Mark Bardell, Mel, Christian, Geoff Roberts

IN THE KNOW

- On the 19th November , 1977, Mel Croucher created Automata UK, thus founding the entire British computer games industry.
- The name Automata was based around Mel's collection of vintage automatons (such as wax-cylinder phonographs), and an idea he had to turn it into a business. He got sidetracked into gaming instead, but the name stuck.
- On the 23rd August 2012, Mel was belatedly bestowed with one the highest accolades of the Albanian state for *Deus Ex Machina*. At its peak, there were apparently as many as four original copies of the game circulating in the east European country.
- Automata prided itself on the quality of its prizes. For example, the two ladies who won the *PiMania* competition secured a golden Sundial that was worth approximately six thousand pounds.
- Automata's biggest seller was *PiMania* – "By a mile. Direct mail orders by the sack load. Oh happy days," said Mel.
- Christian Penfold's PiMan suit was hand-stitched by a tribe of African pygmies who subsequently began worshipping the nasally-enhanced character.
- PiMan day is the 22nd July. To this day, Mel continues his campaign to make the date a worldwide national holiday.

*Some facts may not be true. In fact, some facts may be bare-faced fabrications.

"I was site architect to an autocrat with a beard named Sheikh Rashid bin Al Maktoum"

MEL'S JOB PRIOR STARTING AUTOMATA

so invigorated by the idea of a bright digital future that they would phone up Mel and he would sell them lots of games. Additionally, recording the transmissions and loading them into home computer via a cassette player would reveal some clues to help listeners solve a competition. Yes, this is where Mel's idea of videogame-based competitions began, in case you hadn't worked it out. "It was hardly programming, just some lines of text, geographic co-ordinates and as much subversive filth in the clues that I could get away with," he laughs.

Automata was soon expanding as Mel recruited staff to supply the skills he lacked. First was Robin Evans. "I hired [Robin] as a graphic artist because he was better at it than me," explains Mel, "and I already knew I was crap at sales so I asked him if he knew any tame and cheap salesmen." Robin then introduced Mel to ex-used car salesman Christian Penfold. "Who wasn't tame at all, but he was bloody cheap," said Mel. In 1981 Automata began to gather steam, and indeed so did the British software industry in general. "At that time there were a handful of software companies in Britain and we could all fit into one scout hut and share a taxi home," says Mel. But over a year later… "We numbered around 460 with 1200 titles competing for a slice of the market." The media had also began to take notice at this new phenomenon that had already outlasted its initial short-term fad stigma. When a bulk-buy of C30 cassettes (mainly for the purpose of recording Mel's side-line of tourist guides) appeared, there was an opportunity to use the stockpile by filling them up with games and comedy sketches in the form of the *Can Of Worms* compilation for the ZX81. The compilation included eight games of dubious quality and anarchic humour that was sold via mail-order, and sold rather well. While Mel remained the ideas man, Christian Penfold programmed the software and many of Automata's earliest efforts. "He had an unknown and untapped natural talent for programming," recalls Mel, "And best of all, he loved turning my daft ideas into programs a lot more than I did." A few more releases followed for the ZX81 before Sinclair released its famous follow up, the ZX82, sorry, ZX Spectrum, in 1982. Like many, Automata saw the potential for much more advanced (or rather, naughtier) games on this new, powerful computer.

Yet Mel was dismayed already by the type of games that were being created by Automata's competitors. ▶

» WARNING! Insanity at work!





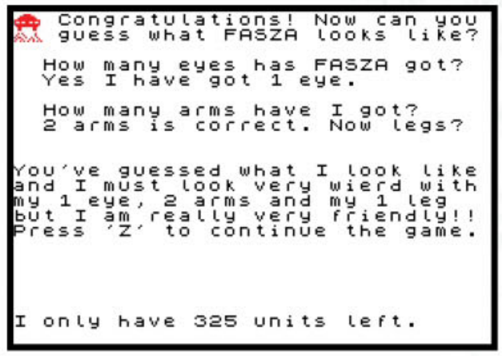
▶ "Don't confuse me with being a games designer," he says testily, "I'm a bit more complicated than that and my pacifism goes back a long way." With an anarchic and cheeky moraine running through the majority of Automata's games, Mel has long become used to defending attacks from self-appointed moral guardians. "I was once on the BBC, I think it was the sanctified *Woman's Hour*," he explains, "and got challenged about encouraging sexual activity in my games. My answer is always the same: should parents encourage their children to simulate killing or kissing?"



» [C64] The beguiling and utterly disastrous *Deus Ex Machina*.

After a couple of minor releases on the 16k Spectrum, Automata was ready for its breakthrough hit. The world didn't know it yet, but there was a new type of hero on the horizon: PiMan. Mel tells us the genesis of this strange creature. "A friend of mine lived in a flat in North London and there was a guy in the basement behind who we could watch from the kitchen window. He was a surrealist poet called Ivor Cutlor." We paused at this point, wondering if Mel was pulling our leg. Ivor Cutler? "He had quite a major role in the Beatles movie, *Magical Mystery Tour*. And I stole most of PiMan's character and all the PiMan's voice from him." The first game to feature this strange fellow was *PiMania*, which became famous for being utterly unlike anything else on the market and featuring an abstruse competition that someone amazingly managed to win. "To be perfectly honest I had no idea I was doing anything revolutionary," admits Mel, "It just seemed natural to include a real-world prize to bribe people to play the f***er. With Robin drawing the cartoons, Christian Penfold pushing the numbers and Mel creating the music, *PiMania* was a combined effort that included a form of viral marketing in its PiManiacs club. The prize took some working out, but Mel was never worried that it would not be claimed. "I knew I could always drip-feed extra clues via a weekly cartoon strip, or via music releases," he explained. No matter - after two years the puzzle was finally deciphered. "They were two ladies called Sue and Lizi from the People's Republic of Yorkshire," said Mel of the eventual winners. "When they turned up at noon on Piday, the 22nd day of the seventh month, standing in the horse's mouth of a giant chalk carving on a hillside, well, I didn't have the heart to tell them I'd located the gold and diamonds in the horse's backside. That would have been too cruel. Besides, it was time the prize was won, the press was getting arsey."

Bizarre competitions and horse bottoms aside, Automata received a steady stream of material from

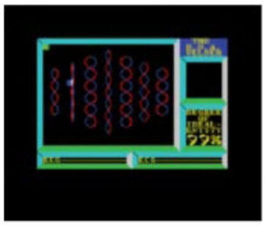


» [ZX Spectrum] Automata's first Spectrum game, *ETa*.

prospective coders. "To be honest, most of them were crap, but we discussed each one and went through them for any sign of merit and originality," reveals Mel. Jas Austin, who would go on to code games such as *Nemesis The Warlock*, *Slaine* and *Rex* for Martech Games, submitted the simplistic Easter-themed *Bunny* as part of another Automata sponsored competition. "Jas was by far the best bespectacled, under-aged, undersized and over-talented entry we received when we thought it would be fun to give kids a chance to get ripped off and find fame," grins Mel. "And he blames me for leading him astray into a lifetime of games creation and claims I still owe him almost a quid

> **"To be perfectly honest I had no idea I was doing anything revolutionary"**
> A MODEST MEL EXPLAINS THE DEVELOPMENT OF PIMANIA

DEFINING GAMES



Deus Ex Machina

An original and groundbreaking amalgamation of music, film and videogame, coded by Andrew Stagg, from Mel Croucher's vision, the player essentially played themselves as the computer took them through the seven stages of man from birth to inevitable death. Part interactive movie, part game, part visual story, *Deus Ex Machina*'s breadth of praise and subsequent commercial death instigated Mel's and Automata's hatred of piracy.



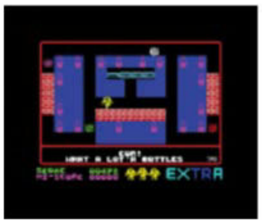
PiMania

PiMania's strange gameplay and beguiling nature put it firmly at odds with the raft of arcade clones of the time. Programmed by Christian Penfold, it was essentially a text adventure, but a weird, daft, and infuriating one all the same. With many players unable to get past the infamous first screen it seemed the golden sundial would never be won, until 1985, when Sue Cooper and Lizi Newman of Yorkshire, put two and two together and got 3.14.



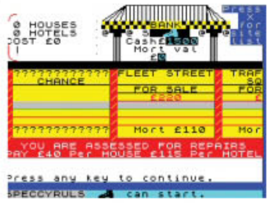
My Name is Groucho, You Win A Fat Cigar

PiMania's follow-up was another BASIC-written adventure game with Automata's brand of subversive humour. The lack of machine code meant the game itself was slow and painstaking in places, and as obscure as its predecessor. "I find it impossible to rate accurately a game which is designed to be a cult" noted one Crash reviewer before admitting they didn't get very far in the game. Like *PiMania* before it, *Groucho* became a 'Marmite' game.



Pi-In-Ere

The third game written by Jas Austin, *Pi-In-Ere* was the most playable of the arcade games Automata released in 1984. A colourful, if unoriginal adventure, the game took the stereotypical setting of inside a computer and combined it with *Boulderdash*-esque style of gameplay. While much praise was reserved for the number of screens, *Pi-In-Ere*'s playability was its key, and it proved a useful stepping stone for the young programmer behind it.



Go To Jail

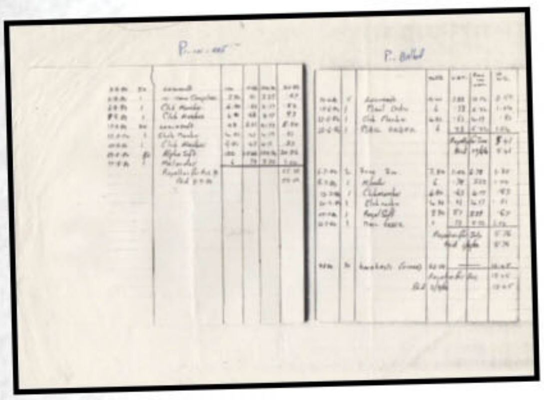
Automata had been the subject of several threats of legal action by the time *Go To Jail* surfaced in 1984. Originally titled (even more daringly) *Automonopoli*, the game did bear an uncanny similarity to the classic hotel-building board game, a similarity that inevitably drew the might of Waddington's legal team against Mel and Automata. After the case was conclusively won in favour of the latter, the game was released once again, although in truth, it was never anything special.

in unpaid royalties." Jas would create the mirthsome *Pi-Balled* and *Pi-In'ere* before moving to local developer Catalyst Coders in 1985.

Back to 1983, however, and Automata was continuing its riotous assault on the games market. *My Name Is Groucho, You Win A Fat Cigar* once more featured PiMan as he accompanied the eponymous comedian on a trip through a bizarre fantasy version of America. Identifying the famous Hollywood star hidden in the game would net someone a seriously cool prize – a trip to America via Concorde, a meeting with the mystery star and a return via QE2. "A lot of players thought they'd be jetting off to meet the US President Ronald Reagan," comments Mel, "I hid an altogether more serious identity in the gameplay called Mickey Mouse. Groucho Marx was one of my heroes, therefore having him as your guide gave me the chance to dress up and crack jokes at computer shows on TV."

Another game from 1983 would become famous for an altogether different reason. "We decided we'd have stab at a conventional family trading game as our main release for 1983," explains Mel of the unsubtly-titled *Go To Jail*, to which we offer no prizes for guessing which particular board game it resembled. After taking legal advice, Mel eschewed his usual riposte to prosecution threats from the vernacular, "F*** off", to the infinitely more polite, "See you in court". And indeed the case did make court, with Waddingtons asserting Automata had stolen its property and damaged its reputation to boot. Automata's reply was truly inspired, digging up examples of similar games previous to Waddington's patent in 1935. This, coupled with the judge's difficulty in seeing any similarity between a board game with hundreds of plastic pieces and a mere cassette, saw the case dropped and the game re-released just in time for Christmas 1983. "But I was beginning to wonder what I was doing," laments Mel, "ripping off celebrations of capitalist exploitation like *Monopoly* in the first place, and then taking on corporations to defend my lack of originality."

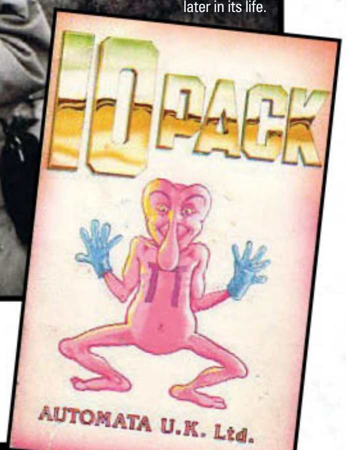
As 1984 dawned, Automata was again, expanding. A particularly noteworthy recruit was coder, Andrew Stagg. "He was a star from day one," glows Mel. ▶



» Automata were fair with its royalties. Here is Jas Austin's royalty calculations for *Pi-In-Ere* and *Pi-Balled*.



» The winners of the *PiMania* competition realise their dreams and meet the PiMan himself.



» [Spectrum] Automata released a few compilations later in its life.

WHERE ARE THEY NOW?



Mel Croucher

Always a busy man, Mel continued writing and created the game *iD* for his friend Clem Chambers (of CRL). Then he happily worked with his all-time hero Frank Zappa and ran some companies, 'mostly badly'. Since 2012, Mel's struggles to bring *Deus Ex Machina 2* to the masses have taken their toll; a terrible accident on his sixty-fifth birthday, not only temporarily put him in a wheelchair but also scuppered the sequel's appearance from a second round on Kickstarter. Finally backers received the game earlier this year and Mel is slowly but surely recovering from his accident.

Christian Penfold

Christian soldiered on briefly as the sole owner of Automata, before selling the label to Interceptor and retreating to Brittany.

Andrew Stagg

Andrew told us: "Shortly after the release of *Deus Ex Machina* I got involved in the family business of windows and blinds that took up the next 25 years. I found a use for my computer skills, but I never wrote another game."

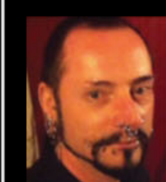
Carol Ann Wright

After Mel left Automata, Carol Ann worked with him briefly on another venture before becoming a writer of children's stories then retraining as a cognitive behavioural psychotherapist.



Robin Evans

Today Robin works mainly as a quick sketch cartoonist for weddings and other events. He also still dabbles in painting, comic strips and animation. he still works with Mel on the comic strip 'Great Moments In Computing' for *Computer Shopper* magazine.



Jas Austin

A meeting with David Wainwright of Catalyst Coders led to Jas working with Dave Dew and Neil Dodwell. The three subsequently left Catalyst and formed Creative Reality, producing games such as *Nemesis The Warlock* and *Slaine* for Martech. When Jas left Creative Reality, he joined BITS Entertainment and today works for Origin8 games.

TIMELINE

1948 MR AND MRS CROUCHER ARE PROUD OWNERS OF FUTURE FOUNDER OF THE BRITISH COMPUTER GAME INDUSTRY, ARCHITECT, PACIFIST AND WRITER. THEY CALL HIM MEL AND HE DRIBBLES A FAIR BIT.

1955 MEL PROGRAMS HIS FIRST GAMES MACHINE, SOOTY'S XYLOPHONE SONG BOOK. FORTUNATELY FOR THE COMPUTER GAMES INDUSTRY, THE TOY'S TOXIC LEAD PAINT FAILED TO HAVE ANY LASTING EFFECT OTHER THAN SOME MILD INSANITY.

1966 MEL GETS HIS FIRST EXPERIENCE OF A *REAL* COMPUTER THANKS TO PORTSMOUTH POLYTECHNIC'S MAMMOTH COMPUTER, APPROPRIATELY NAMED 'THE BEAST', AND BEGINS A COMPUTER PROGRAMMING COURSE LED BY THE CHARMING MISS CRUNT. POSSIBLY NOT HER REAL NAME.

1975 HAVING BEEN PERSUADED TO TAKE UP A CAREER AS AN ARCHITECT, MEL ABANDONS THE RATHER GRIM, RECESSION-LOCKED UK AND STARTS WORK IN DUBAI.

1977 RETURNING TO THE UK WITH A POCKET STUFFED FULL OF SHEIKH MONEY, MEL PURCHASES A COMMODORE PET AND LATER IN THE YEAR FORMS AUTOMATA. NOVEMBER THE 19TH TO BE PRECISE.

1981 THE SINCLAIR ZX81 ARRIVES AND AUTOMATA'S FIRST MAJOR RELEASE IS A COMPILATION ENTITLED *CAN OF WORMS*. HIGHLIGHT OF THE COMPILATION IS A GAME CALLED *ACNE* WHERE YOU HAVE TO…ERM, WORK IT OUT FOR YOURSELF.

1982 THE ARRIVAL OF THE ZX SPECTRUM OPENS UP A WHOLE NEW WORLD OF INSANE HIJINKS FOR THE AUTOMATA TEAM.

1983 *PIMANIA* LANDS AND A NEW VIDEOGAME ICON IS BORN. *GROUCHO* ALSO FEATURES THE CHARACTER AND OFFERS ANOTHER PRIZE COMPETITION.

1984 A BUSY YEAR FOR AUTOMATA WITH SEVERAL NOTABLE RELEASES, MOST SIGNIFICANTLY, MEL CROUCHER'S MASTERPIECE, *DEUS EX MACHINA*.

1985 *PIMANIA*'S COMPETITION IS FINALLY CLAIMED BY LIZI NEWMAN AND SUE COOPER WHO ARE AWARDED THE BARBARA TIPPLE-DESIGNED GOLDEN SUNDIAL. THEN IN APRIL 1985, MEL CROUCHER SELLS AUTOMATA FOR TEN PENCE TO CHRISTIAN PENFOLD, RETAINING THE RIGHTS TO HIS OWN CREATIONS.

1987 CHRISTIAN PENFOLD SELLS AUTOMATA, SUCH AS IT REMAINS, TO HAMPSHIRE-BASED INTERCEPTOR MICROS.

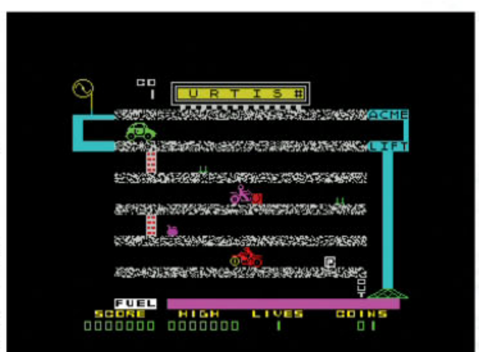


» The Automata crew, as painted by Robin Evans.

"I'd say to him I need the Speccy to do this, that or the other and he'd say it was impossible. Then we'd go for a pint and work it out and he delivered every time. I love the guy. He's a bald-headed granddad now, but you can't blame that on me." Along with Jas Austin's *Pi-Balled* and *Pi-In'ere*, Andrew's *Pi-Eyed* provided a triple-pronged assault in the first half of 1984 that paved the way for what would become Automata's greatest achievement – and also its biggest disaster.

Despite recognising the commercial need for arcade-style games such as those mentioned above, Mel was wearying of the day-to-day running of a software house and Christian Penfold's method of negotiating with various distributors. Automata had moved to Highland Road, Portsmouth, conveniently opposite a pub and next to a cemetery among other things, "A retail outlet, admin office, programming suite and a music studio for me to play with my toys," says Mel about the new location. When Automata finally folded in 1987, the office was sold to a dental practice. "We made more money on that deal than we ever did selling software. A sad comment on capitalism versus creativity." But back in 1984, Mel retreated to the top floor and began working late to avoid the daytime treadmill. "I wanted to get back to the fun of creating original stuff and get away from second-hand ideas," he admits. "I trawled back through all my ideas, trying to see if the themes could be combined to take videogames to another level." While in the midst of what Mel calls 'self-indulgent stuff', he was organising a memorial service for his recently-departed mother. One of his duties was to deliver a eulogy. "The best I could come up with was a series of quotations. I ever-so-slightly rewrote Shakespeare's *Seven Ages Of Man* as part of it." After the service, Mel kept the cards he had written the quotes on and studied them on the top floor of Automata as Christian dealt with distributors below. "They summed up a whole life in a few words," said Mel, "And there it was, the theme for a game that could be played like being in your own movie." Then he took a pen and wrote out the words '*Deus Ex Machina*' on a sheet of graph paper.

Deus Ex Machina told the story of a life under a dystopian regime, with the game itself a set of devices that aimed to immerse the player in the audio and visual concepts. It was clearly ahead of its time, but even Mel himself didn't quite realise how much



» [ZX Spectrum] Here's Stephen Curtis' first game, *Morris Meets The Bikers*.

"I thought it was too ambitious a product to get ripped off"

MEL'S NAÏVE ASSESSMENT ON THE ATTRACTIVENESS OF DEUS EX MACHINA TO ORGANISED PIRATES

ahead. "I had no doubt in my mind that it could be done technically and I believed anyone could do it. I genuinely thought that by the mid-Eighties all cutting-edge computer games would be like screenplays, with proper structure, real characters, voices and plot. So I thought I'd better get in first before others started churning out negative violent rubbish." As it transpired, *Deus Ex Machina* became a multimedia product before the term even existed and was approximately 25 years before its time. An impressive achievement. Automata focused not only on the game itself, but also the packaging and talent behind the voices with Ian Dury, Jon Pertwee and Frankie Howerd all lending their mellifluous tones. The scene was set for a revolution.

It wasn't long before the high praise started rolling in. "[*Deus Ex Machina*] is staggeringly original, unique and impressive," said The Sunday Times. "Hypnotic, emotive, noble, humorous, absolutely excellent," gushed Crash Magazine. "Un nuevo concepto en el modo de entender los juegos," pined Spain's Microhobby. "That was welcome, but puzzling," says Mel of the latter comment. "As I'd never sent a review copy to anyone outside of the UK." Caught up in his self-admitted ego-trip, the alarm bells failed to ring inside Mel's head. *Deus Ex Machina* was getting lots of attention from organised piracy. "I thought it was too ambitious a product to get ripped off," says Mel. "After all, it wouldn't be cheap to reproduce everything, and they were hardly going to translate the audio into their own language." Despite its critical approval, the game was hardly a mainstream title. So why was *Deus Ex Machina* getting so much attention from pirates? There was one very good reason: the price. Automata viewed *Deus Ex Machina* as a premium product, but its price of £15 ($20 in the United States) attracted the pirates to it in droves. "I'd invested everything I had in *Deus Ex Machina* and paying the stars was the most expensive element," said Mel about the ambitious project. "I was hoping to recoup my investment earlier rather than later." And worse, he was correct that there was no way the pirates would go to the length of translating and copying the audio, hence reducing the game to "incomprehensible piddle," to those who acquired a pirated version.

In the aftermath of *Deus Ex Machina*'s release, Automata blamed the distributors, the distributors blamed Automata, and subsequent re-releases of the game from CRL and Electric Dreams failed to make any further impact, causing Mel to retreat once again to the top floor of Automata HQ. "I threw an almighty strop," he admits, "It's not my nature to confront people I work with, so I retained the rights to my games and music and quietly walked." Feeling it was time for a change, Mel sold Automata to his partner in 1985, for a mere ten pence. Christian persevered briefly, releasing a handful of original games and compilations of older releases. But the party was over.

For Mel, the power of that energetic and free industry will never be forgotten. "For a while, the UK led the world in videogames. It was something special. I feel that same sense of energy, that there are boundless chances of success for developers who have the nerve to question the status-quo. But who says so? I say so. I'm the founder of the British computer games industry. I'm the Grand Wazoo." *

THE ABANDONED

A veritable flowing pot of ideas, Mel had many thoughts and concepts that failed at various stages. "I designed a whole series of artificial intelligence modules for the Currah speech unit. There was a whining brat, a pompous boring twat and it was all a bit Lenny Bruce meets Dick Emery. I thought it was hilarious but some reason no-one else did. Then there was a quest adventure for blind people based entirely on sound effects and I also spent a year putting a lover in your pocket via a Psion Organiser. That came close, but I was a bit ahead of my time. About 25 years as it turned out." Yet perhaps Automata's greatest game-that-wasn't was the one with the most endearing title. "After I hired Jon Pertwee to narrate *Deus Ex Machina*, I got to know him very well." Explains Mel. "We were working on another game together called *Wozwell And The Time Ticklers* and Jas Austin got as far as drafting some scene backdrops." The ambitious plan for *Wozwell* was to have the Spectrum graphics in sync with a VHS videocassette and even spliced together. When the technology failed, so did the game.



» Automata at national games exhibition, 1983. Its stand had been cleared of product in protest against violent and sexist games.

THE DNA OF AUTOMATA



Mail Order Only

The only way to cut out the 'leeches' and sell direct to its loyal customers. Automata was championing the cause of mail order as late as 1985 when all the other software houses had moved on.



Non-Violence

Mel is a long-time pacifist and this reflects in his work. Mel was passionately determined that none of Automata's games should have overtly violent aspects. Mel remained true to his word.



Pushing The Boundaries

While many of Automata's games were arcade games, Titles such as *PiMania* and *Deus Ex Machina* in particular showed what videogames could achieve.



Music, Maestro

Mel admits he enjoyed creating music more than games. Making music with games seemed to Mel like a "neat way of force-feeding my compositions onto an unsuspecting audience."



Funny Bones

From PiMan's elongated nose to the crazy and effervescent cartoon strip-style adverts, a sly comic dig at the computer games industry or in fact any other fancied target, was never far away.



Competition Time

There were a few videogame competitions around at the time but none quite like Automata's. The superb prizes warranted difficult and obscure puzzlesand at times, took years to solve.

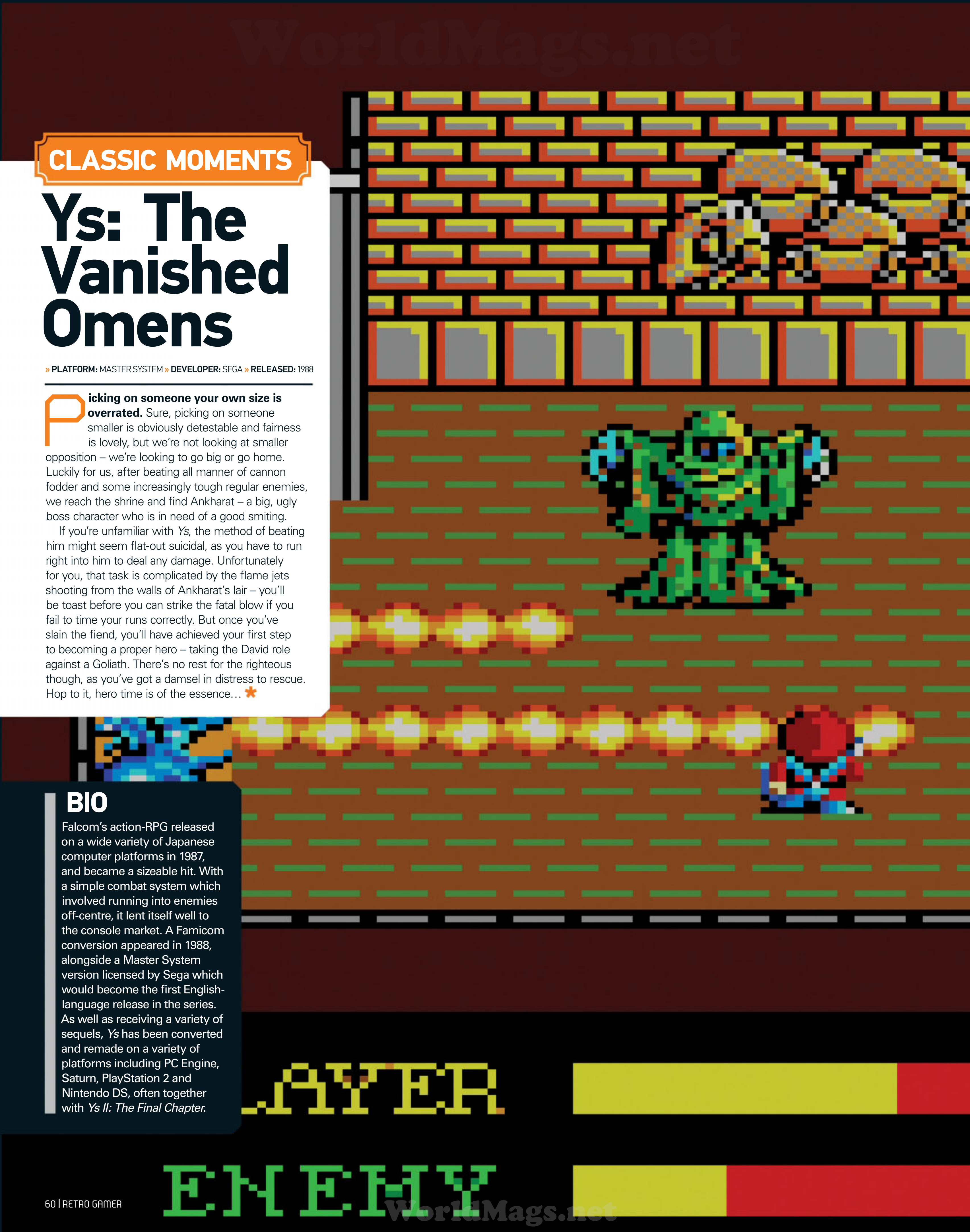
CLASSIC MOMENTS

Ys: The Vanished Omens

» **PLATFORM:** MASTER SYSTEM » **DEVELOPER:** SEGA » **RELEASED:** 1988

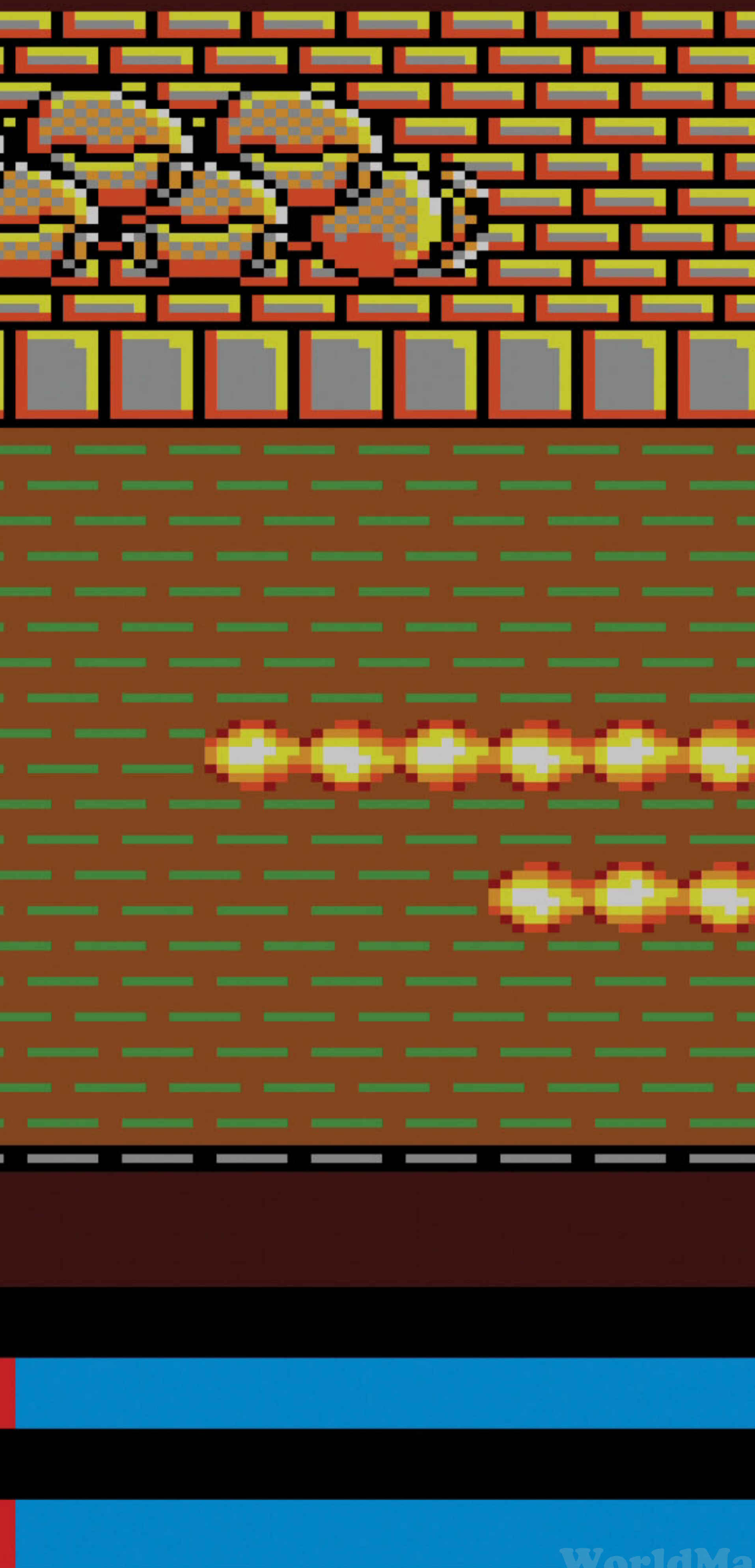
Picking on someone your own size is overrated. Sure, picking on someone smaller is obviously detestable and fairness is lovely, but we're not looking at smaller opposition – we're looking to go big or go home. Luckily for us, after beating all manner of cannon fodder and some increasingly tough regular enemies, we reach the shrine and find Ankharat – a big, ugly boss character who is in need of a good smiting.

If you're unfamiliar with *Ys*, the method of beating him might seem flat-out suicidal, as you have to run right into him to deal any damage. Unfortunately for you, that task is complicated by the flame jets shooting from the walls of Ankharat's lair – you'll be toast before you can strike the fatal blow if you fail to time your runs correctly. But once you've slain the fiend, you'll have achieved your first step to becoming a proper hero – taking the David role against a Goliath. There's no rest for the righteous though, as you've got a damsel in distress to rescue. Hop to it, hero time is of the essence… *



BIO

Falcom's action-RPG released on a wide variety of Japanese computer platforms in 1987, and became a sizeable hit. With a simple combat system which involved running into enemies off-centre, it lent itself well to the console market. A Famicom conversion appeared in 1988, alongside a Master System version licensed by Sega which would become the first English-language release in the series. As well as receiving a variety of sequels, *Ys* has been converted and remade on a variety of platforms including PC Engine, Saturn, PlayStation 2 and Nintendo DS, often together with *Ys II: The Final Chapter*.



MORE YS: THE VANISHED OMENS MOMENTS

Going Unpunished



Early in the game, it's possible to buy a sapphire ring from the town market, but a local denizen will happily inform you that the trader is dodgy and the ring was stolen. Return the ring to its rightful owner and not only will you get the satisfaction and warm feeling inside of doing a good deed, but a reward which leaves you with a 50% profit. Nice!

Road To Ruin



As the fields and towns give way to a narrow, rocky path up a cliffside, it's easy to get the sense that the stakes are getting higher. The ascent towards the temple near Zepik visually highlights a turning point in Aron's quest, from the preliminary stages of low-level combat and simple item retrieval into the game's first proper dungeon.

Helping Feena



While adventuring, Aron finds a girl named Feena who couldn't remember how long she had been locked away or why. Though Aron couldn't comprehend the importance of his actions, his natural instinct for helping people told him that the only just thing to do was to rescue the damsel in distress. It was at that point that he becomes a true hero.

Dark Depths



When you venture down to the mines for the first time, there's a massively increased sense of danger. The monsters are the most dangerous so far, but that's just the start of your troubles. The real worry is that the darkness means you'll be totally unaware of those monsters until they're within striking range, and your escape routes are hidden too!

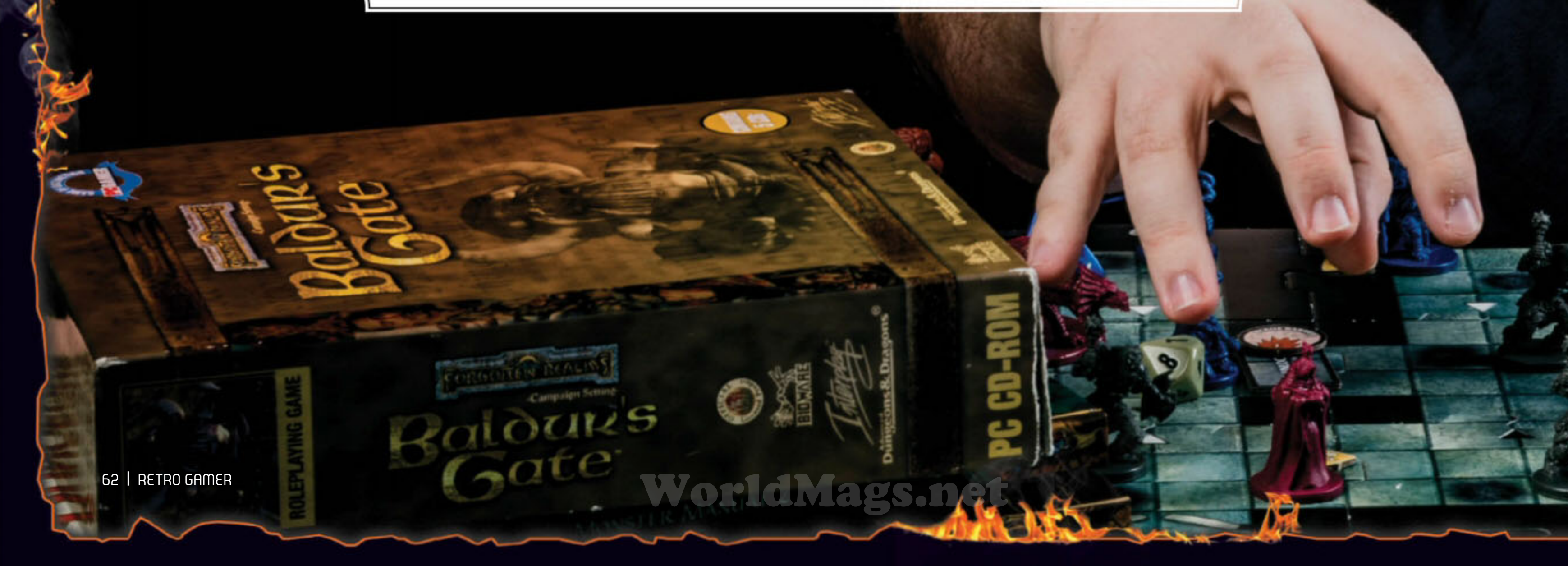
THE Bluffer's guide TO

Dungeons & Dragons

Its devoted fans have seen unrivaled derision, its games have caused moral panic and it is now in its fifth edition. Through all this, Dungeons & Dragons still remains computer and pen and paper role-playing gaming's de facto brand. Craig Ritchie looks back at the forty years of gaming since the RPG powerhouse first hit our tabletops

Created in 1974 by Gary Gygax and Dave Arneson and published by the now-defunct gaming giant TSR, the clearly Tolkien-inspired *Dungeons & Dragons* brought a high fantasy element to a hobby that was primarily the domain of serious wargame and strategy titles, along with the complexity essential to those genres. Computers provide a perfect means of removing the note-keeping, dice rolling and inventory management which can be time-consuming, yet, endearing elements of the pen and paper original. It's handy, then, that a Venn diagram of *D&D* players and computer enthusiasts looks like a single circle – so of course they were the ones to first implement computerised versions of the early ruleset. Unlicensed fan products appeared as far back as 1975, the most well-known of these being *pedit5*, *dnd* and *Dungeon*. Programmed on PLATO and PDP-10 mainframes, *pedit5* was the earliest of the lot, coded in about a month by Rusty Rutherford, and it holds the honour of being the first computer role-playing game ever.

By the early 1980s the view of the gaming landscape was pretty clear: titles such as *Akalabeth*, *Ultima* and *Wizardry* were scratching the role-playing itch, but gamers were ready for more. The





Know your Dungeons & Dragons

SAVING THROWS

■ These are dice rolls which are checked against character stats to determine whether an offensive spell was successful, a trap managed to cause damage, and so on.

ARMOR CLASS

■ Represented by a number that through various *D&D* editions has gone from lower is better to higher is better, AC is the overall measure of how difficult something is to hit.

POLYHEDRAL DICE

■ The randomness that is fundamental to the franchise is thanks to *D&D*'s dice collection, ranging from four-sided through to twenty-sided. Got to roll those 20s!

ATTRIBUTE SCORES

■ These are the building blocks of your characters, from their Strength and Dexterity to their Wisdom and Charisma, and they also affect bonuses and penalties and so on.

FEATS

■ Introduced in 3rd Edition, a wide variety of Feats added more customisabilty to one's characters, who could now use a range of new special abilities.

EDITIONS

■ The various official incarnations of the ruleset have changed over the decades, each edition bringing new refinements and rule changes both loved and loathed by fans.

PROFICIENCIES

■ Effective weapon use requires training and practice, and *D&D* accounts for this by requiring one to select which weapons to master when leveling up.

EXPERIENCE POINTS

■ The foundation of character progression awarded when killing enemies or completing quests, experience points, or XP, are now a stable in almost all RPGs.

Bluffer's guide



officially licensed *D&D* games released by Mattel for the Intellivision were simplistic games that shared the franchise name but were not actual implementations of the *D&D* ruleset at all. This changed in the mid-Eighties, and after close on a decade of waiting, the great video gaming leap forward for *D&D* would finally come when TSR announced it would be taking bids for the videogame's licence.

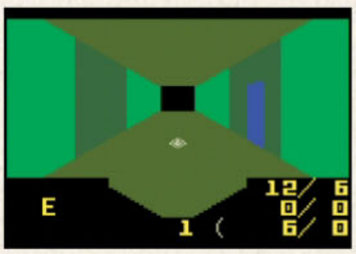
SSI, who had made a name for itself as a developer and publisher of serious wargame and strategy titles had already started to dabble in RPGs such as the *Phantasie* and *Questron* series, and it wanted a crack at the *D&D* licence. It was its relationship with a fledgling studio in Las Vegas called Westwood – and its timely showing off of a demo of an unrelated game – that would lead to SSI taking home the gold despite bids from some of the biggest names in the videogaming industry.

"Westwood was only a handful of people at the time," says Louis Castle, co-founder of Westwood Studios and now director of Castle Production Services, "maybe six or seven of us. The demo, including the art and tools was my one-man job. I had just completed work on some of the Epyx titles and was starting to work on the original game, *The Mars Saga*, which we eventually sold to EA. In the course of designing the game I wanted to offer a 3D view into the Mars bases. A game called *Wizardry*, by Sir-Tech, was affectionately known by many as *D&D* on a computer. It did not have the licence, but it truly captured the spirit of *D&D*. I was hooked on the 3D maze crawling from that game and another game on the Macintosh called *Maze Wars*. I really wanted that to be in my Mars game."

Developing on the Commodore 64, Louis had to overcome the technical challenge presented by the machine's roughly 1.0 Mhz 6502 chip as it did not have the processing power to render 3D views. He found his solution in Karnaugh maps, a decades-old technique for expressing Boolean algebra in two-dimensional grids.

"I had the idea for my digital design courses to use Karnaugh maps to reduce the rendering of the 3D space into a forward renderer with minimal occlusion," explains Louis, "which allowed for the very fast rendering of a 3D maze in the character graphics space of the C64.

"I am pretty certain no one had done so before and I am 100% certain that it was used many times since. I had to introduce some inaccuracies in the character mapping and camera aperture to get things to line up correctly on character boundaries. These amounted to a unique digital signature, so for years I would see games where developers solved it



» [Intellivision] *Advanced Dungeons & Dragons* for Intellivision was the first *D&D* game to appear on home systems way back in 1982.



» [PC] Less pure *D&D* due to its console RPG-like elements, *The Genie's Curse* ended up an entertaining. yet, divisive game.

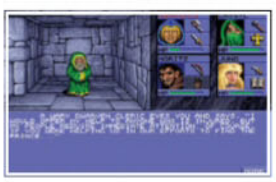
Five essential games

Averaging almost a release per year since TSR started licensing D&D video games, here are the five must-plays...



CHAMPIONS OF KRYNN
■ 1990 ■ Various

While neither the first nor the most technically advanced of the Gold Box titles, *COK* took great strides to smooth out some of the earlier games' rough edges. As part of the *Dragonlance* series, *COK* introduced many gamers to the world of Krynn and kicked off a grand adventure where parties could be imported into Death Knights and all the way through to Dark Queen.



EYE OF THE BEHOLDER
■ 1990 ■ Various

Taking everything that *Dungeon Master* did right, improving the graphics, interface, adding true *D&D* mechanics, *EOB*'s mazes, puzzles and real-time combat pulled in an audience far beyond *D&D* aficionados. You can also watch a video of the completed but unreleased Atari Lynx version on YouTube. We'd argue that *Eye Of The Beholder 2* is the better game, but *EOB*'s impact is far more important.



DARK SUN: SHATTERED LANDS
■ 1993 ■ PC

Moving to a new engine and the savage, post-apocalyptic dark fantasy world of Athas, *Shattered Lands* was a great character-driven adventure with underrated turn-based *D&D* combat. It was rightly criticized for having an art style that didn't quite do its harsh setting justice, but gamers who get stuck in regardless, will find a deep and rewarding overlooked gem.



PLANESCAPE: TORMENT
■ 1999 ■ PC

Anything but a dungeon crawler, *Planescape: Torment* remains a prime example of how computer games can be a perfect storytelling medium. With its unparalleled cast of characters, dark themes and comprising of around 800,000 words of text, this is an expansive and superbly written instance of genuine role-playing. We hope it gets the Enhanced Edition treatment.



BALDUR'S GATE II
■ 2001 ■ PC

The pinnacle of the *Infinity Engine* titles and regarded by many as the greatest computer RPG ever made, *BGII* featured countless hours of adventuring, diverse paths for different classes, and an epic story in a fantasy world brimming with content both inside and outside the city of Amn. Now almost a decade and a half old, this is the game today's RPGs still hope they are compared to.



» [PC] The recently released *Dungeons & Dragons: Chronicles Of Mystara* consists of Capcom's arcade games.



» [C64] *Curse Of The Azure Bonds* was an excellent sequel, adding more classes and higher character levels.

in their own way and some that almost certainly reverse engineered my own solution."

Westwood Associates presented the work-in-progress 3D engine to Chuck Kroegel at SSI in an attempt to sell the idea of the Mars game. Kroegel, however, saw the massive potential in Louis's work and instead wanted to use the demo to present to TSR the framework of what would become the now legendary Gold Box games.

"The problem was Chuck really wanted to show a finished engine working with a complete tool set," recalls Louis. "They didn't have the project yet so we did the work for a small percentage of the games as long as the used the tools and tech. I spent the better part of a month on 80 plus hour weeks devoted the project to get a full dungeon character set, map and some rough monster sprites. I also built the early tool set that allowed for some rapid dungeon editing and monster tracking."

Louis's long hours and Kroegel's presentation paid off handsomely. Outdoing the likes of EA and Mediagenic, who merely showed off slideshows of its top AAA titles of the time, SSI pitched to TSR with working software showing how it would bring the licence to home computers, as well as a dedicated team who were not only already engaged in the project, but also had a clear passion for *D&D* and won the coveted licence.

"In the end the guys at SSI did all the heavy lifting," says Louis, "with a full presentation of their studio, commitment to the franchise and really smart design ideas on how to preserve the detail of *D&D* in a computer game. I'm very happy to be part of the solution that landed the deal. Chuck later said it was a transformative moment for SSI – they would become the *D&D* company."

SSI's first *Gold Box Dungeons and Dragons* game, *Pool Of Radiance*, was a runaway success and received praise from players and reviewers alike. "*Pool Of Radiance* is about to change the face of role playing as we know it", wrote *Computer & Video* ▶

> "Chuck really wanted to show a finished engine working with a complete tool set"
>
> Louis Castle on creating an engine for TSR

Chris Avellone

The RPG master on the past and future of D&D



***Dungeons & Dragons* is now 40 years old. Why do you think it has seen such lasting appeal?**

That's a good question. It feels like *D&D* is the ultimate nostalgia trip, and ties into the youth of most developers and players I know – it seems like there was always a time in the past where they played *D&D* with their friends around the living room table, and they remember it fondly. Or still play. I suspect the Tolkien influences and the fact the franchise seemed to hit the right beats with their products over the years, and then Dragonlance really blew up in the story arena and novels as well - all of this helped increase its popularity and also made new generations of nostalgic fans.

What is your favourite element of *D&D*?

The idea that it's a game of imagination with rules. That feels fair to me. That might be a high-level answer, but it's what struck me the moment I heard about the concept – I could tell a fantasy story, go on a great quest, but there were rules and a structure to the dungeon-delving that made it more of a challenge.

As far as specific elements go, what I like best is opportunities to role-play without being punished for it (depends on the Dungeon Master), the gain of loot (nothing beats the thrill of new magic items, either finding them or buying them), gaining new spells for my spellbook (I usually play a wizard because I am a fan of *Jack Vance's Mazirian The Magician*), and improving my character over time.

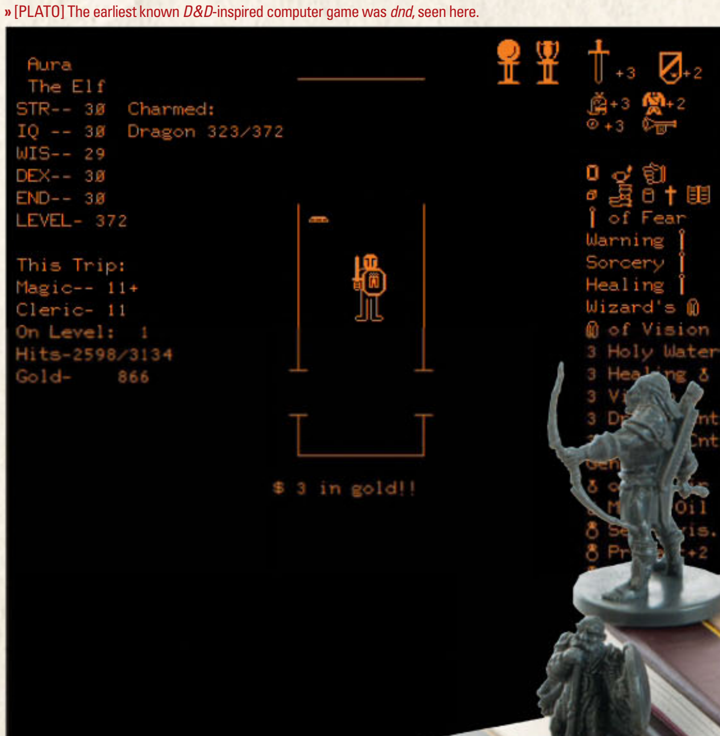
What was the *D&D* game you enjoyed working on the most?

There were two: *Planescape: Torment*, because it was a setting that allowed me to do anything by its very nature, including overturn *D&D* rules, and *Icewind Dale 2* (specifically, Targos), because we could just have fun with it. For *Icewind Dale 2*, we were already afraid everyone at the company was going to lose their jobs if we didn't get it out (Interplay was starved for cash), but we all buckled down, charged into it, and tried to do the most fun game we could within the constraints of the licence and if possible, save jobs along with it (we didn't, although we extended the company's life).

Finally, what alignment and class is Chris Avellone?

I am a Lawful Neutral Bard: 7/Wizard: 3 who often doesn't get enough sleep to memorize all his spells and can't play any instruments, so I'm pretty useless in any party.

» [PLATO] The earliest known *D&D*-inspired computer game was *dnd*, seen here.







» [PC] *Dragons Of Flame* brought the *Heroes Of The Lance* gameplay out of Xak Tsaroth – unfortunately it wasn't good.

Games back in their October 1988 issue – how right it was.

Pool Of Radiance and the its successor titles comprised a number of core gameplay elements that worked together beautifully. The main adventuring screen had a small window with the first-person view rendered in 3D, a list of the party's characters and their key info (such as hitpoints and condition) took up the upper left portion of the screen, and a status window at the bottom displaying in-game messages, alerts and menu options. Encounters would switch the first-person window into a detailed image (sometimes with animation) showing off the NPC, monster or location, before the entire UI switched to the combat interface.

Not just a favourite among fans, it was also a pivotal moment in gaming that would influence many future developers, among them designer Chris Avellone, who has worked on some of the biggest RPGs of the last two decades, including numerous *D&D* titles.

"The first *D&D* game I played was *Pool Of Radiance*," says Chris, "and I had been dying to play it because it meant I could finally be a player and not a Dungeon Master. I remember being surprised by how true to the rules it was (which saved my ass considerably), and the way they structured Phlan so you felt like you were "taking back" the city piece by piece was great. I remember panicking the first time I encountered the Spectre in Mantor's Library, which was doubly frightening because of how close they had been following the rules up to that point… I had many reloads".

Now with a string of critically acclaimed games, and TSR more than happy with SSI's use of its brand, the development team decided to take *D&D* games where they'd never been before: onto the back of Krynn's dragons in what would go on to be one of the series' most divisive titles, *DragonStrike*. SSI released a innovative and truly novel 3D flight simulator that had players wielding a Dragonlance as they fought for territory in the skies above Krynn. This was a title that many gamers balked at while others couldn't sink enough hours into, and its lead developer also fondly remembers it.

"If I can pick my own favorite *D&D* game, it would have to be *DragonStrike*," says Louis. "I really wanted to work on a flight simulator so Westood pitched the idea to SSI to make a dragonflight sim. It was great fun to create the all-assembly true-3D fractal tech. I also did the design, story and some of the art. One of the most exciting parts of working on *DragonStrike* was that Westwood's story became part of the *Dragonlance* canon. Many of us were huge fans of the Margaret Weis and Tracy Hickman books so it was a great honor to thread our game into their world."

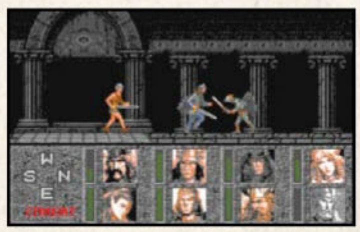
The *D&D* franchise also holds the honour of seeing the earliest graphical multiplayer online RPG, way back in 1991. The original *Neverwinter Nights*, also built around the *Gold Box* engine, was an American Online exclusive that was also the most popular game on the service. Peaking at 500 simultaneous players at the height of its success in the mid 1990s, it was certainly one of the most popular among the early MORPGs and paved the way for the likes of *Ultima Online*, *World Of Warcraft* and, of course, *Dungeons And Dragons Online*.

SSI's success with the license had laid the foundation of trust from TSR that would allow Westwood to

> "Pool Of Radiance is about to change the face of role playing as we know it"
>
> *Computer & Video Games* sees into the future



» [Amiga] Due to its blend of RPG and flight-sim elements, *DragonStrike* is the ultimate love-it-or-hate-it *D&D* title.



» [Amiga] Side-scrolling *D&D* kicked off with *Heroes Of The Lance*, based on the first *Dragonlance* novel.

Selected timeline

1974

DUNGEONS & DRAGONS

■ TSR publish the original version of Gary Gygax and Dave Arneson's tabletop RPG.

1975

DND

■ Just a year after its inception, *Dungeons and Dragons* sees the first videogame both based on and named after it.

1976 1977 1978

1979

DUNGEON MASTER'S GUIDE

■ The first *Dungeon Master's Guide* is published by TSR. Again authored by Gary Gygax, it contains everything need to run your own campaigns.

DUNGEON

■ Don Daglow released the first version of his *D&D*-inspired RPG. While earlier titles had only one playable character, Daglow implements full party control.

1980 1981

1982

AD&D: CLOUDY MOUNTAIN

■ Mattel, first to license the franchise, launches an *Advanced Dungeons and Dragons* video game that has little in common beyond the title.

1983



develop *Eye Of The Beholder* in 1991 – not just one of the best *D&D* games of all time, it also showed that *D&D* rules could work in real time. While the likes of *Heroes Of The Lance* and *Dragons Of Flame* put popular characters, spells and other *D&D* elements into real-time action games, they were not really using the core *D&D* mechanics. *Eye Of The Beholder* on the other hand took first-person dungeon crawling to new heights – or lows, considering it took place in the depths beneath Waterdeep – with devious puzzles, a good range of Forgotten Realms enemies and NPCs, and all within a faithful interpretation of 2nd Edition *Advanced Dungeons & Dragons rules*.

By now gamers had seen the licence brought to computers and consoles in isometric RPGs, first-person RPGs, tactical combat sims, side-scroller action titles and of course, a dragonflight simulator – indeed, no genre was safe from the juggernaut of *D&D*. As could be expected, it also saw its share of strategy titles, in so doing giving a nod to the games that had inspired *D&D* videogames in the first place. SSI's *War Of The Lance*, was an excellent title in the genre. Another popular strategy title was Stronghold from Stormfront Studios, an innovative title putting players in charge of an entire kingdom with *D&D*-classed heroes. Taking place in real time, though, not an RTS in the regular sense of the genre, it was a deep and very popular strategy and resource management sim. Silicon ▶

WHAT MAKES A GREAT DUNGEONS & DRAGONS GAME?

DUNGEONS

■ Not strictly always a dungeon per se – it could be a cursed tower, a forest maze or sewers beneath Waterdeep – but this is where it all happens.

CAMEOS

■ With so much lore to draw upon, many a *D&D* developer has enriched their story through a appearance of Khelben, Drizzt or the Heroes of the Lance.

ENCHANTED WEAPONS

■ From simple +1 arrows through to the warhammer Crom Faeyr, *D&D* brings us that oh-so-moreish RPG loot.



MONSTERS

■ You'll encounter all sorts of creatures in a game of *D&D*, from displacer beasts, to orcs, goblins and beholders. Now where's our +1 sword?

MAGIC

■ Without it, it'd be a game of fighters and thieves rescuing princesses from other fighters and thieves. Clearly, it is fundamental to the nature of the franchise.

» [Mega CD] On top of its computer releases, *Eye Of The Beholder* saw ports on the SNES, GBA and Mega CD.

1984 · 1985 · 1986 · 1987 · 1988 · 1989 · 1990 · 1991 · 1992 · 1993

POOL OF RADIANCE (1988)

■ The first of the *Gold Box* series is launched to great commercial success, winning awards, new fans, and forging a long-lasting roleplaying legacy.

AD&D: 2ND EDITION (1989)

■ The entire *D&D* system receives a major overhaul. 2E brings big changes to the tabletop phenomenon, including efforts to clean up its public image.

EYE OF THE BEHOLDER (1990)

■ Appealing to a wider audience than just hardcore *D&D*'ers, Westwood Associates' beautiful and brilliant first-person RPG takes home computers by storm.

NEVERWINTER NIGHTS (1991)

■ The first online *D&D* game and the first graphical MMORPG, this AOL favourite was a runaway success from Don Daglow's Stormfront Studios.

TREASURES OF THE SAVAGE FRONTIER (1992)

■ The final *Gold Box* game ends on a high bringing graphical improvements and the earliest instance of NPC romances.

DARK SUN: SHATTERED LANDS (1993)

■ SSI's first non-*Gold Box D&D* game is released and it allowed gamers to enounter the *Dark Sun* campaign for the first time.



Did you know?

1 In the 1980s, religious fundamentalists caused a moral panic around the world by connecting *D&D* to such ills as Satanism, sexual perversion, and even cannibalism. The one that really took hold was an unsubstantiated link to teenage suicide, but thankfully public perception has long since moved on.

2 Don Daglow started with fan projects before producing some of the earliest official *D&D* computer games, later leading the development of such classics as *Gateway To The Savage Frontier*, *Neverwinter Nights* and *Stronghold*.

3 The early *Gold Box* titles had a string of tie-in novels that closely followed the plots of the games.

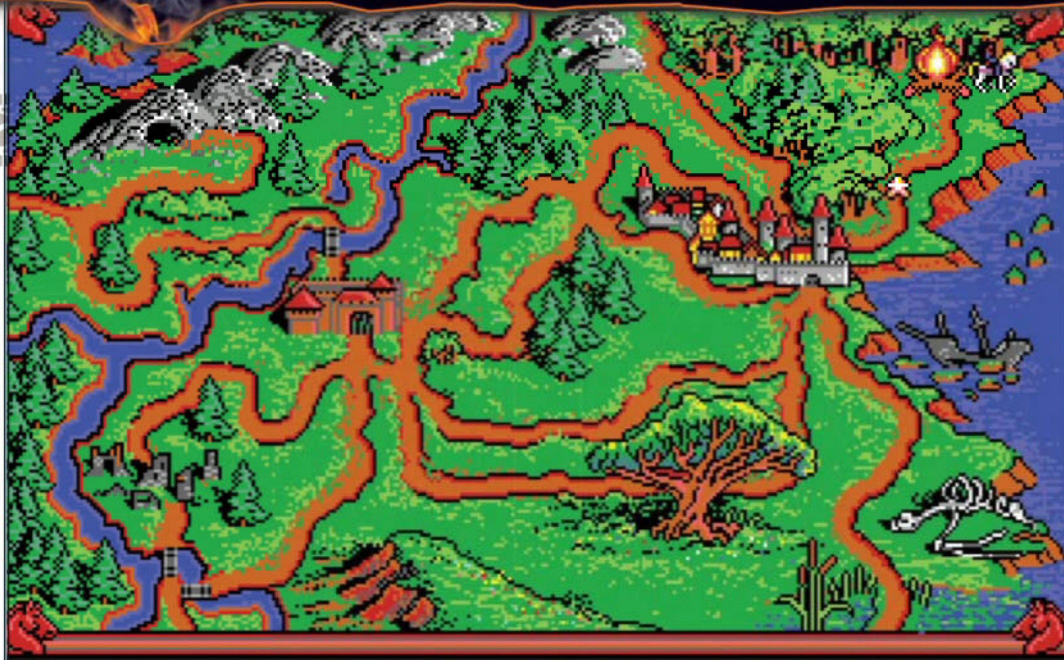
4 The same compression technology used by Westwood to fit *DragonStrike* on a single floppy disk was later implemented to get *Command & Conquer*'s full screen video and audio to work on a single-speed CD ROM drive.

5 Many Westwood Associates employees lent their likeness to the character portraits you'll see in *Eye Of The Beholder*.

6 After taking controversial strides to implement gay marriage in *Fallout 2*, the same devs continued this progressive attitude in *Temple of Elemental Evil*, where male characters could marry the pirate Bertram.

7 Fans love remaking the classics, and *Pool Of Radiance*, *Baldur's Gate* and *Icewind Dale* are now all playable as *Neverwinter Nights 2* mods.

8 Dave Gross, who joined the team at Overhaul Games to work on the new content in *Baldurs Gate: Enhanced Edition*, was one of nine *D&D* novel writers who Wizards Of The Coast collectively credited as T. H. Lain.



» [Amiga] Hillsfar's jumble of action sequences and standard *Gold Box* fare made for a unique if not all too classic title.

▶ Knights' *Fantasy Empires* combined traditional turn-based strategy with action sequences for combat, and Sierra's *Birthright: The Gorgon's Alliance* threw in real-time elements with adventures occurring in pseudo-3D. In an attempt not to be outdone by *Command & Conquer* and *Warcraft: Orcs & Humans*, *D&D* took a stab at the genre in 1996 with the release of *Blood & Magic*. It was a franchise-faithful RTS worth looking up if you're a fan of the genre with more than a passing interest in *D&D*. Be warned, though, it was a slow-moving game even back when it was launched, and it has sunk to a sluggish pace by today's standards. Similarly, 2005's *Dragonshard* was neither an amazing RTS nor an amazing *D&D* game, but thankfully had more than enough of each to be worth a look from fans (not to mention it is available today on GOG.com for a steal).

While *D&D* was still being put to solid use in videogames through the mid-Nineties, it had actually been a good few years since the last true RPG. In 1992, after the release of *Treasures Of The Savage Frontier*, the *Gold Box* engine was retired after its thirteen game run. It would be seen again in *Spelljammer: Pirates Of Realmspace* and in the RPG development toolkit *Unlimited Adventures*, but its line had came to an end as SSI shifted to newer tech in the *Dark Sun* games.



» [Amiga] Admit it – you also threw together a few bearded ladies during character creation, didn't you?

Wizards of the Coast buys TSR

■ In a reported $25million deal, *Magic: The Gathering* owners WotC acquire the struggling original publisher of *Dungeons and Dragons*.

3rd Edition

■ WotC publish a new *Dungeon Master's Guide*, now in its third edition. 3E sees a major overhaul, increased complexity, rave reviews, and mixed reactions from long-time 2E fans.

Neverwinter Nights

■ The first *D&D* title published by Atari, BioWare's hit includes the Aurora toolset which allows thousands of fans to build and share their own modules.

1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003

Baldur's Gate

■ Six years since the launch of the last great *Forgotten Realms* title, BioWare's epic wins numerous Game of the Year Awards, sells in the millions, and reignites the genre.

PoR: Ruins of Myth Drannor

■ A blight on the *Pool Of Radiance* name, Ubisoft forces the launch of a disappointing, bug-riddled game that even deleted some players' operating systems.





The new engine, first released in 1993, was unfortunately hosting some critical bugs and the graphics were not quite up to par with the rest of the industry – nor did they suit the *Dark Sun* campaign setting and sadly, they would prove nowhere near as popular as the *Gold Box* titles. A victim of unfortunate timing, SSI's hope for a new wave of RPGs that would see them succeed through the 1990s had come at a time when Nintendo and Sega dominated living rooms, while Sony's PlayStation was a year away from launch and games such as *Doom* all but ruled the PC. Another new addition to the *D&D* universe came in 1994's *Al-Qadim: The Genie's Curse*. While great on the story and Arabian Nights-themed adventure, it was light on core *D&D* and disappointed fans looking for another hardcore experience.

D&D did follow the industry by going fully-3D in the two *Ravenloft* titles of 1994 and 1995, but they weren't enough to pull computer RPGs out of the slump they saw in the Nineties. The *D&D* franchise did stay busy, though, offering the previously mentioned strategy titles, the disappointing late Nineties outings *DeathKeep* and *Iron And Blood*, and the rushed to market *Descent To Undermountain*. An honourable mention must be given to *Tower Of Doom* and *Shadow Over Mystara*, two excellent arcade games from Capcom that beautifully melded side-scrolling beat-em-ups with core *D&D* gameplay.

This changed when November of 1998 saw the release of BioWare's *Baldur's Gate*, and *D&D* was well and truly back. Like the first *Gold Box* games, *Baldur's Gate* appropriated an engine originally intended for another title and more than exceeded the original design.

"*Battleground Infinity* was going to be about Ragnarok, the Norse end of days," explains Trent Oster, co-founder of Beamdog, whose resume includes *Baldur's Gate*, *Neverwinter Nights* and the recent *Baldur's Gate Enhanced Editions*. "A rough demo was built showing off the big features. Our producer at Interplay on *Shattered Steel*, one Feargus Urquhart heard about the demo and asked to see it. He was the one who suggested the *D&D* license and since everyone at BioWare was a total *D&D* fanboy ▶



» [PC] The original *Pool Of Radiance*, where players first experienced the *Gold Box* games back in 1998.



» [Amiga] *Shadow Sorcerer* was well received thanks to its excellent real-time, isometric *Dragonlance* action.

» Darran was going to play our DM, but his beard is nowhere near as impressive as Nick's.



2004 – **2005** – **2006** – **2007** – **2008** – **2009** – **2010** – **2011** – **2012** – **2012** – **2014**

2006: DUNGEONS AND DRAGONS ONLINE
■ Turbine bring 3.5E into the subscription MMORPG market with a great *World Of Warcraft* alternative that has since gone Free to Play.

2007: DUNGEONS & DRAGONS TACTICS
■ Atari publish the only *D&D* game to appear on Sony's Playstation Portable.

2012: BALDUR'S GATE: ENHANCED EDITION
■ Beamdog release an excellent remake of *Baldur's Gate*, fixing bugs, overhauling the UI, adding new NPCs, additional playable areas, and an arena-style game mode.

2014: ICEWIND DALE: ENHANCED EDITION
■ Like the *Baldur's Gate* series before it, the *Infinity Engine* dungeon crawler is reworked for modern computers and mobile devices.

Universes Explored: The many worlds of Dungeons & Dragons

There have been plenty of games based on the campaign settings of D&D…



DICE SCORE = GAMES RELEASED IN EACH UNIVERSE

AL QADIM

■ The Arabian Nights-themed *Al Qadim*, is based on the same world as the *Forgotten Realms* adventures. Home to only one computer game, it's a world with a lot of untapped potential.

MYSTARA

■ A high-fantasy fan favourite since it came out in 1980, the world of Mystara has played home to three platform-exclusive video games as well as both Capcom's *D&D* coin-ops.

BIRTHRIGHT

■ Centered on ruling nations, large-scale war and divine bloodlines, *Birthright* was a pre-*Game Of Thrones* of sorts that was heavier on political doings than it was on epic fantasy questing.

DARK SUN

■ A barren post-apocalyptic wasteland featuring psionics as well as magic, *Dark Sun's* bleak desert world presents a campaign setting which screams out for a modern release.

DRAGONLANCE

■ Popularised by Margeret Weis and Tracy Hickman's *Chronicles* novels, *Dragonlance* is a fantasy universe with a developed history and a cast of memorable characters.

EBERRON

■ 2004's *Eberron* is one of *D&D*'s most recent campaign settings. While it may never match *Forgotten Realms*, expect more titles set in this world of fantasy with a garnish of steampunk.

FORGOTTEN REALMS

■ The most widely known *D&D* setting, The Realms are home to legendary locations such as Baldurs Gate, Waterdeep, Neverwinter, Amn, and Icewind Dale.

GREYHAWK

■ The original fantasy *D&D* campaign from Gary Gygax. It was developed and supported for over 25 years and is still now one of roleplaying's most richly detailed worlds.

HOLLOW WORLD

■ Released in 1990, this setting based beneath the surface of Mystara saw only one video game release: the Megadrive-exclusive *Warriors Of The Eternal Sun.*

PLANESCAPE

■ Although *Planescape* links many other campaign settings together and brings a span of outlandish content to the *D&D* canon, is it unfortunately no longer officially supported.

RAVENLOFT

■ Released in 1990, *D&D* had its own take on the suave blood enthusiasts. Despite its popularity, the gothic horror world saw just the three videogames. A pity as it's one of the best settings ever created.

SPELLJAMMER

■ Not strictly one world so much as an adventure in the space linking the major locations in the *D&D* universe, the setting of Spelljammer took *D&D* to space.



» [PC] *Dragonshard* was a prime example of forcing a franchise into a genre that didn't quite suit it.

> "I suspect there will be classic franchises with a new, superior coating of technology"
>
> Chris Avellone on the future of *D&D* videogames

at the time, the team jumped on the chance."

Thus an RTS to be known as *Battleground Infinity* fell by the wayside to provide the DNA for what would become the *Infinity Engine*, powering *Baldur's Gate* and its amazing sequel, as well as *Planescape: Torment* and both *Icewind Dale* games. It had been years since the franchise's last massive roleplaying game appeared, but what a return it was. The *Infinity Engine* games sold millions of copies, garnered an outstanding number of awards, and like the *Gold Box* games before them, made *D&D* accessible to a new generation of fans. Its time was far from over and it continues to forge its legacy thanks to the ongoing work on the *Enhanced Edition* remakes.

BioWare would continue to be the premiere name in *D&D* gaming at the turn of the millennium, releasing *Neverwinter Nights* in 2002. Where *Neverwinter Nights* excelled was in its Aurora Toolkit, which made it easy for would-be DMs and game designers to build their own *D&D* modules. It may have had an admittedly lacklustre official campaign, but its expansions *Shadows Of Undrentide* and *Hordes Of The Underdark* were massive steps up, and also brought improvements to Aurora. Another landmark *D&D* title both for gamers and modders, it also allowed persistent online instances of certain modules and saw BioWare win even more RPG of the year awards.

During the time *Neverwinter Nights* was peaking, Black Isle Studios would suffer a fatal blow when it was closed by Interplay. Obsidian Entertainment soon formed as the successor studio, keeping many of the same staff. No strangers to *D&D*, Obsidian would carry the torch with the improved *Neverwinter Nights 2*, the *Electron Engine* would likewise expand the quality of modder offerings. There are now hundreds of high quality adventures waiting to be downloaded, including extensive remakes of some of the most popular *D&D* games.

It's now been more than eight years since *Neverwinter Nights 2* launched, and other than its expansions and the *Enhanced Edition* remakes from Beamdog, fans have not seen a core *D&D* game in some time. Some may go so far as to wonder where *D&D* computer games can innovate from here. There is such an extensive back-catalog with games in almost every genre covering the most popular campaign settings. With no end in sight for the brand, is it onwards and upwards for new games as new *D&D* editions come out, or has forty years of *D&D* computer gaming already stretched the offerings to the point where we'll see nothing new come out of the franchise?

Trent feels that *D&D* and the computer gaming genre it paved the way for is far from done. "I think there is a ton of room left for innovation," he says. "I think even within the isometric view alone there are almost endless ways to innovate. Videogames have always been constrained by the capabilities of the computers or consoles which operated them. More recently however, the variety of gaming has been constrained by the creative risks that larger publishers were willing to take, which lead to innovation mainly on the visuals.

"We have now entered a golden era, where independent developers can undertake whatever risks they are willing to invest in," he explains to us, "and as one of those developers, I have to say that the future for RPG innovation looks very bright." ✱



» [PC] Billed as a 'kingdom simulator', *Stronghold* was hit from *D&D* computer gaming legend Don Daglow.



» [PC] Marred by a buggy release, *The Temple of Elemental Evil* has now been fan-patched to its potential.

Trent Oster

A one-on-one with the co-founder of Beamdog



Why do you think *Dungeons & Dragons* computer games have been so successful?

I think there is a fundamental connection between video games and *D&D*. Some of the first attempts at making video games in the dawn of computing science were *D&D* styled games. I think *D&D* is just such a fundamentally great experience that making a version of the game you could play more frequently than pen and paper is just logical. I think the fantasy genre is a great setting and *D&D* is just such a solid implementation of a rules system to allow you to adventure in that setting. It just works.

How much of a challenge was it for you to secure the rights to create the *Infinity Engine Enhanced Editions*?

I spent an entire year negotiating. Even with the original deal we've still had ongoing challenges as well. In short, we went through a great deal of effort to obtain the rights for these games and we are putting in a great deal of effort to make them the best they can be. We believe the *Baldur's Gate* games and *Icewind Dale* are some of the best *D&D* roleplaying on any computer platform and we're very committed to bringing them to the fans, old and new.

Congratulations on releasing *Icewind Dale:EE*! We all want to know… *IWD2* and *Planescape Torment* – are these going to happen any time soon?

Thanks! It was some hard work by some really awesome people (many of whom joined our company out of the *BG* mod community). As for the future, we're going to wait for a bit and fix up *Baldur's Gate II: Enhanced Edition*. We shipped *BGII:EE* a little early and a number of bugs leaked out. We are committed to spending time to make it right and ensure everyone can have access to a great *BGII* experience. After that, we'll have to play it by ear and see.





Atari's brawler was the first to use digitised graphics, a groundbreaking technique for the time. Kieren Hawken tracked down designer and programmer Gary Stark to find out what sparked this revolution

IN THE KNOW

» **PUBLISHER:** ATARI GAMES
» **DEVELOPER:** IN-HOUSE
» **RELEASED:** 1990
» **PLATFORM:** ARCADE
» **GENRE:** FIGHTING GAME



» Gary Stark's love of martial arts movies can be seen in *Pit-Fighter.*

First released to arcade audiences in August 1990, *Pit-Fighter* was quite unlike any fighting game that had come before it. Previously, games of this genre had always been 2D affairs with pretty pixel drawn graphics and, more often than not, an oriental theme. A big fan of martial arts movies, Atari Games programmer and games designer Gary Stark was proposing to do something very different…

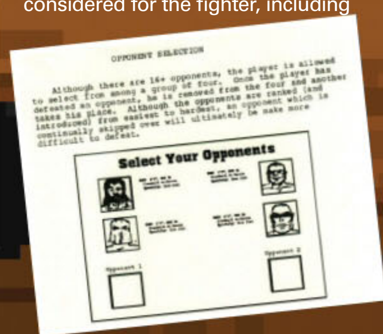
"Atari had always made family orientated games and it started looking obvious that fighting games were becoming very popular at the time," he reveals. "Atari were very against the idea at first and it took a meeting with Hide Nakajima (who was CEO of Atari Games at the time), the producers and the directors to get them to go ahead with the project. It took a lot of convincing!"

Interestingly, the actual idea for *Pit-Fighter* presented itself after Gary watched a popular Jean-Claude Van Damme movie. "*Blood Sport* was definitely the inspiration for *Pit-Fighter*," he admits to us. "I had just watched that movie around that time and it seemed like a great idea for a game, we even used it as the working title." In fact the title Atari ended up using, *Pit-Fighter*, was chosen just before the game was ready to hit the arcades. After Atari realised that it couldn't use *Blood Sport* due to copyright infringement, a multitude of other names were considered for the fighter, including *Tough Enough*, *Blood Warriors*, *Prize Fighters*, *Arena Of Death* and the hilarious *Masters of Buffness*."

The design of *Pit-Fighter* was set out very clearly from day one and differed very little from the initial concept, something very unusual for the time, especially a title with such ambitious concepts and ideas. Gary proposed that *Pit-Fighter* would feature digitised graphics, co-operative multiplayer gameplay, weapons, interactive arenas and different fighting styles. While all of this sounds very standard for a game released today, back in the late Eighties it most certainly wasn't. The biggest feature of *Pit-Fighter* was arguably its visuals – digitised graphics had never been used in a fighting game before (*Mortal Kombat*'s release was still two years away), and Gary explains how the use of the technique came about. "We had just got a video booth at Atari and had just done a bit of testing with it, so it seemed a good fit for the game to use real people. It was a nightmare for the people who worked on it though as this had never been done before. There were a lot of teething problems."



» [Arcade] Every third match is a grudge match where you must face off against an identical version of yourself.


OPPONENT SELECTION

Although there are 16+ opponents, the player is allowed to select from among a group of four. Once the player has defeated an opponent, he is removed from the four and another takes his place. Although the opponents are ranked (and introduced) from easiest to hardest, an opponent which is continually skipped over will ultimately be make more difficult to defeat.

Select Your Opponents

Opponent 1

Opponent 2





» [Arcade] Our heroes will do a quick pose for the camera after they have performed a super move.

> **"I actually had to get business cards made up that said 'Talent Scout' on them to seem more legit!"**
> Gary Stark goes Hollywood

Finding people to star in this new game also posed it own problems too. "I was a big gym bunny so knew where to find people to be in the game," Gary enthused. "I went round the local ones looking for people with the right look. But people didn't believe me when I said I was looking for people to be in a videogame, that just wasn't something normal at the time. I actually had to get business cards made up that said 'Talent Scout' on them to seem more legit!" Then came the challenges of actually filming the actors in their roles, something that Gary became very involved in. "All the actors were filmed in front of a green screen, but it didn't really work with them just acting out moves. So I volunteered to put on a green suit and get beaten up! All the moves in the game are being performed on me!"

Another striking feature of *Pit-Fighter* was its use of scaling to zoom in and out of the playfield, itself quite a new concept that ▶

AL BAKER

The coder talks about the challenges he faced putting the arcade game onto the Atari Lynx

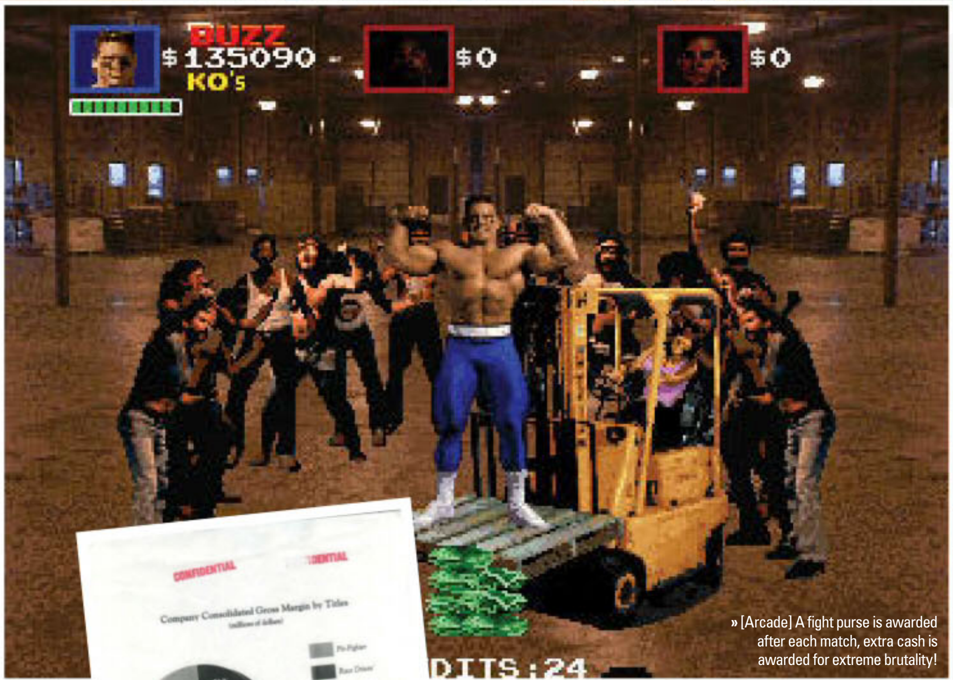


Given how advanced *Pit-Fighter* was for its time, did you think it would be a struggle to convert it?
Oh yeah! [laughs] But, I'd had experience with impossible situations. This was THE hardest by far and generated a lot of sleepless nights.

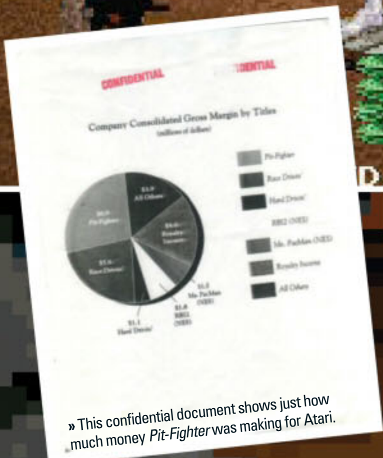
Did you get access to all the original source code and if so how much easier did that make and how useful was it?
I did, which leads to an interesting story. There was actually a version of C running on the Lynx, so I spent some time getting the original code ported over and actually got that running on the Lynx. It ran at an amazing frame rate, about 1 frame every 15-20 seconds! I went through that line-by-line converting the code from C to assembly. That got the frame rate up to a playable level AND remained faithful to the original game! In fact, I believe someone pointed out in an article about the game shortly after it was release, that the Lynx version had some of the same bugs in it as the Arcade version!

The Lynx version is missing the speech from the arcade game, which is strange given that most Lynx games use speech, why was this?
Memory. The trade off was features. We wanted to be as totally faithful as possible to the original game but the Lynx is not a TARDIS. Only so much could get stuffed into it

***Pit-Fighter* is renowned for having some horrible home conversions, are you pleased that you were one of only a couple of people to pull it off?**
Absolutely! Especially considering how many times I woke up in the middle of the night not sure I could pull it off or not!



» [Arcade] A fight purse is awarded after each match, extra cash is awarded for extreme brutality!



» This confidential document shows just how much money *Pit-Fighter* was making for Atari.



DEVELOPER HIGHLIGHTS

COOKIE MONSTER MUNCH
SYSTEM: ATARI 2600
YEAR: 1983

STAR RAIDERS 2
SYSTEM: ATARI 8-BIT
YEAR: 1986

T-MEK (PICTURED)
SYSTEM: ARCADE
YEAR: 1994

> **"It was the very first game that made use of photographed people and attempted to animate them. That was revolutionary at the time."**
> Dennis Koble was in awe of the challenge.

had been pioneered by Sega and its impressive Super Scaler coin-ops such as *OutRun* and *Space Harrier*. Gary tells us how the use of this technology came about. "We had some great hardware guys at Atari and they had recently developed the Scaling Chip. Atari always encouraged us to re-use existing hardware to save money and this seemed like something that could be very useful for the type of game we were making."

So what became a revolutionary game for the time was very much making use of technologies already developed at Atari, they just came together perfectly for *Pit-Fighter*. A game already full of innovative features, the amount of interaction with your surroundings was another attribute that surprised arcade audiences. *Pit-Fighter* allowed you to fight members of the baying crowd, grab weapons and even smash up cars that had been foolishly parked in the arena. "The interaction with the environments was planned from day one, we really wanted to make the game something different," explains Gary. "We always wanted to make weapons available to the player." In fact, the number of weapons in the original concept and design documents is much higher. There was also a wider range of arenas and fight locations with places like a harbour, back alley and building site being considered. These were cut back for the final game due to memory constraints.

The final design of *Pit-Fighter* is a three-player fighting game where you can choose between a trio of very distinct fighters. Buzz is a wrestler who was slow but had the most strength with very powerful attacks. Kickboxer Ty had the longest reach and is gifted with the best agility. And finally there is Kato, a Karate champ who was awarded with speed and hard to execute but deadly moves. The game also allows players to choose the same character, just with a different coloured outfit. Each fighter has three distinct special moves as well as an individual move set, meaning each one plays very differently.

The eight opponents all offer up different challenges and fighting styles that had to be adapted to. This line-up consists of The Executioner (wrestler), Southside Jim (street brawler), Angel (agile dominatrix), C.C. Rider (biker gang member), Mad Miles (army officer), Heavy Metal (punk rocker), Chainman Eddie and his identical twin (huge, muscular, chain wielding thugs) and finally The Warrior (a mysterious masked man and the current champion). In multiplayer mode you have to fight these foes multiple times as they are mixed and matched to provide an opponent for each human player. Every third fight is a grudge match where the human players must fight each other for supremacy. This works different to the standard rounds in that instead of having energy bars, it's the first player to achieve three knockouts that wins. The various fighting arenas, which range from a bar to an underground car park, are surround by a vociferous crowd who are baying for blood. Select members of this crowd will try to get involved in the fray and even give you weapons. If you get to close to them they will also scream insults at you before shoving you back into the fighting pit. The weapons vary greatly and consist of items like sticks and knives as well as motorcycles and barrels containing power pills, packed with steroids that make the player super strong for a short time. After each contest you are awarded with a fight purse, this varies according to the way you fought the match, with money being awarded for extreme brutality and how quick you were able to finish off your foe, among other things.

Pit-Fighter was hugely successful from the moment it was released, the huge audiences for the test machines let Atari know it was onto a winner. The game was soon converted to a multitude of home platforms, hoping to cash in on the success of the arcade game, but was met with very mixed results. One of the very few versions that got it right was the one produced for Sega's Mega Drive. It was released on Atari Games' own Tengen label and programmed by



» [Arcade] Victory comes with a great reward, you not only become a chick magnet – you become a very rich one!



Dennis Koble. Dennis was not only an ex-arcade game coder himself, having worked on titles such as the popular Sprint series as well as the game that inspired *Star Raiders: Starship*, while at Atari Games, but he was also a close friend of Gary Stark. This relationship meant that Gary shared all his source code for the arcade game with Dennis and, as both the Mega Drive and the coin-op used a Motorola 68000 CPU, some of the code could be reused. But converting such an advanced game to the more limited Sega hardware caused its fair share of problems as Dennis explains. "Given the technical limitations of the Genesis, we knew it would be a challenge but it was an exciting opportunity at the same time. It was the very first game that made use of photographed people and attempted to animate them. It was revolutionary at the time. The limitations on the processing power and storage on the Mega Drive were so severe compared to the arcade version that although we considered reproducing the scaling it just became obvious from the onset that it wasn't going to be possible, so we did the best we could."

Atari's landmark title seems to be a Marmite game. We asked Gary why he thought that was. "I don't know," he admits to us, "The only way you can truly judge a game is by how much money it makes, and Pit-Fighter was extremely successful. So that tells me all I need to know!"



» [Arcade] Characters turn green, like the Hulk, when they eat a steroid loaded power pill.

COIN-OP CAPERS



ZX SPECTRUM

■ A brave effort considering the hardware, it even tries to fake the scaling! The music is great but the rest of the game, not so much. Not one of the machine's finer moments.



COMMODORE 64

■ This version suffers from blocky visuals, that are often very hard to make out, and some rather awkward controls. But it does have nice music and plays at a decent lick too.



AMSTRAD CPC

■ Near-identical to the Speccy version, only it has an smaller play area and seems to run slower. Still, like the Speccy, the music is pretty impressive, which is something.



ATARI ST

■ Domark nearly pulled it off here, a great attempt at faking the scaling effects along with some fantastic graphics. But it's let down somewhat by the awkward one button control.



COMMODORE AMIGA

■ Similar to the ST but benefits from its faster speed. That said the controls are still not ideal and the music isn't a patch on the ST tune.



PC DOS

■ Initially, it looks very nice but instead of trying to scale the sprites it merely stretches them vertically for the foreground meaning they look a bit weird.



MASTER SYSTEM

■ The Master System iteration is almost like a whole new game, the redrawn pixel-style graphics bear little resemblance to the coin-op. It's also very dull to play.



ATARI 7800

■ It's perhaps unfair to include this version, as only a prototype exists. But it does show a lot of promise with the large sprites and well-drawn backdrop. A real shame it wasn't finished.



GAME BOY

■ The Game Boy version is surprisingly faithful considering the hardware. Graphics and sound are both excellent, but it lacks in the speed department. One of the better conversions.



SUPER NINTENDO

■ An absolute travesty, the SNES should have been able to pull off a fairly decent conversion. But what we have here is a slow, jerky, uncontrollable mess.



MEGA DRIVE

■ Dennis Koble and Lee Actor did a superb job of bringing this game to the Mega Drive. The scaling is missing but everything else is here and it plays exactly like the original.



ATARI LYNX

■ The Lynx was ideally suited to this game with its in-built hardware scaling abilities and it pulls off the game well. Not only does it play like the arcade game but it looks like it too.

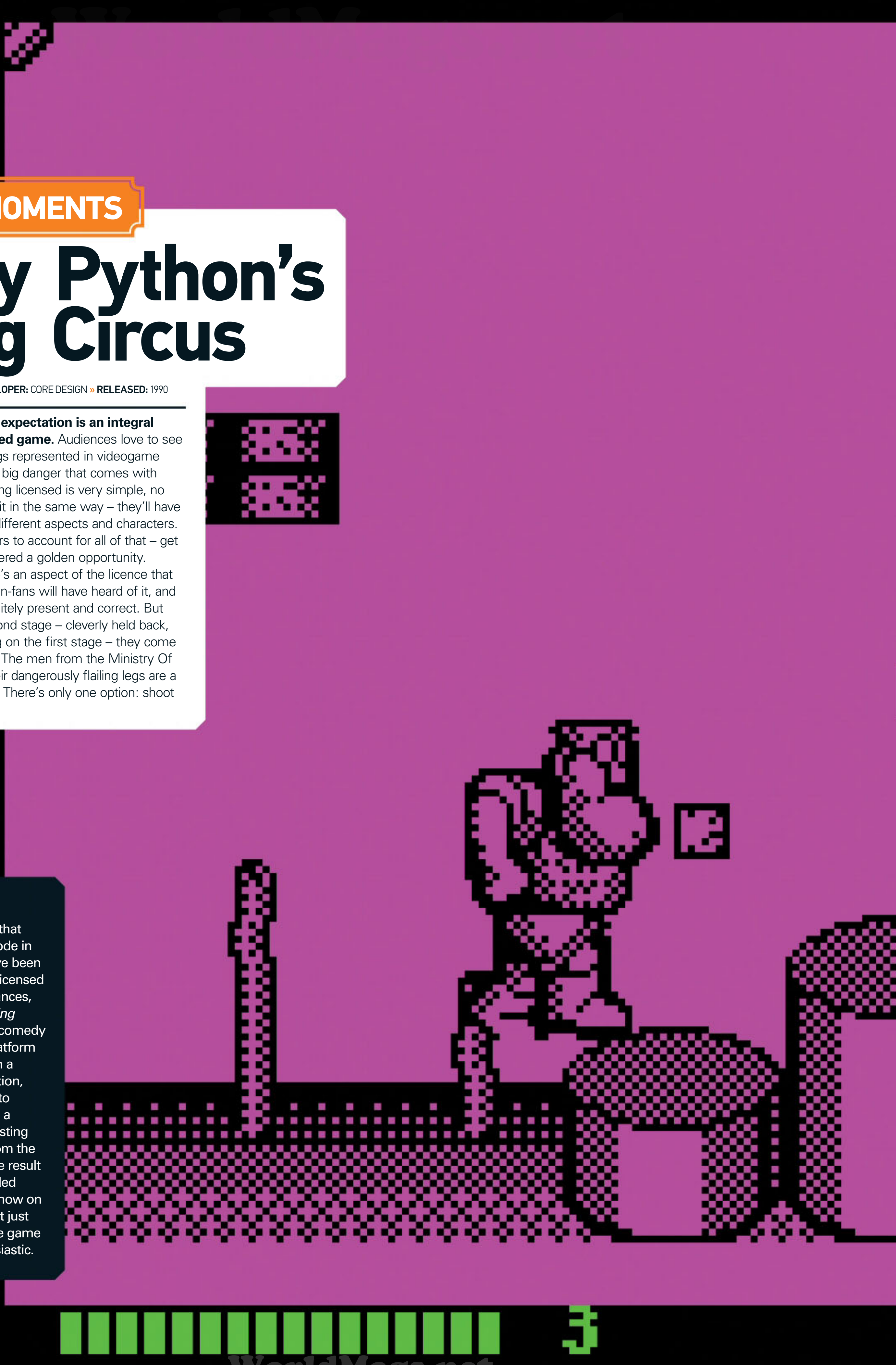
CLASSIC MOMENTS

Monty Python's Flying Circus

» **PLATFORM:** ZX SPECTRUM » **DEVELOPER:** CORE DESIGN » **RELEASED:** 1990

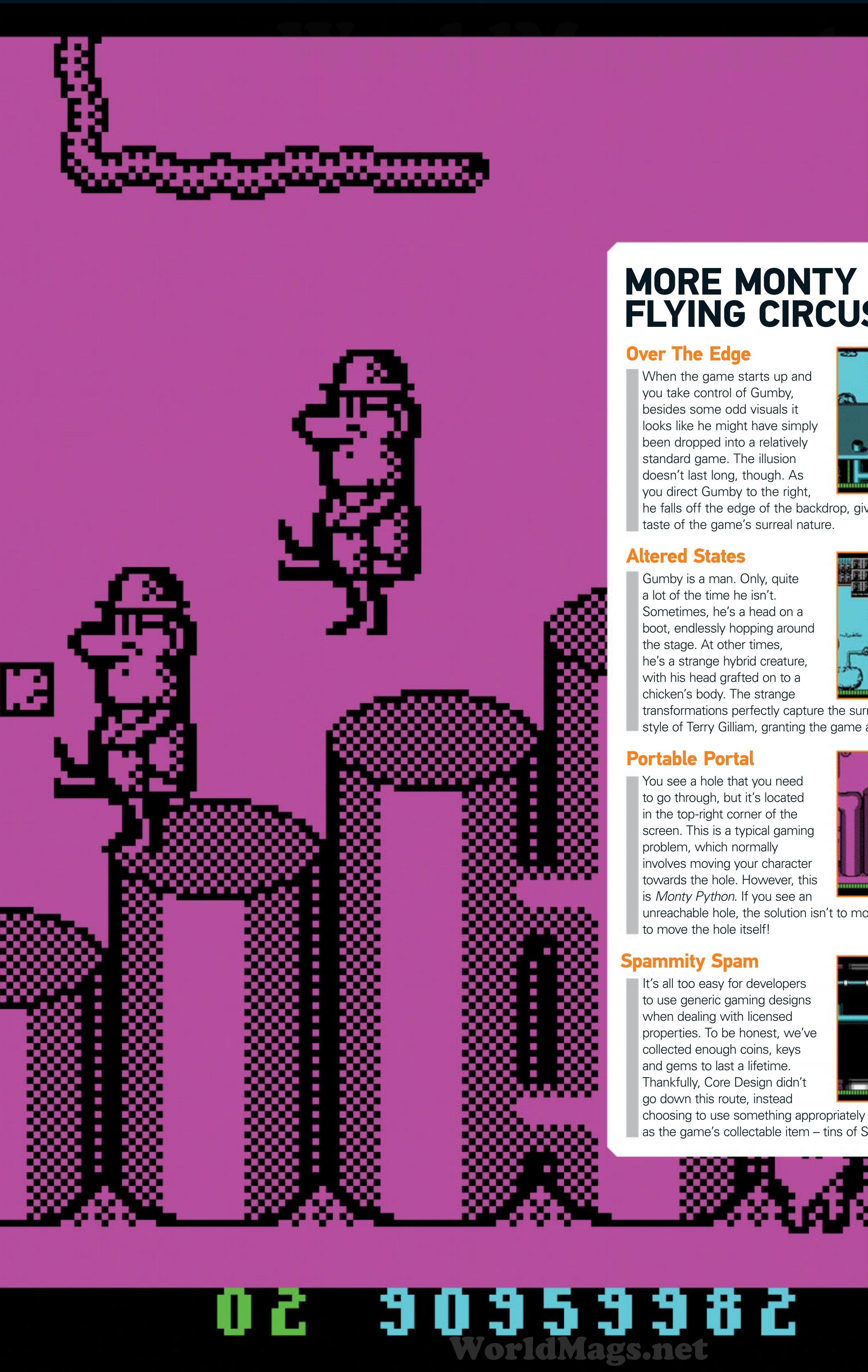
A certain weight of expectation is an integral part of any licensed game. Audiences love to see their favourite things represented in videogame form, but there's a big danger that comes with that. Unless the product being licensed is very simple, no two fans are going to enjoy it in the same way – they'll have preferences for all kinds of different aspects and characters. It's a tough job for developers to account for all of that – get it wrong and you've squandered a golden opportunity.

Sometimes though, there's an aspect of the licence that is so important that even non-fans will have heard of it, and *Monty Python* is most definitely present and correct. But then, at the start of the second stage – cleverly held back, so as not to blow everything on the first stage – they come tumbling down from above. The men from the Ministry Of Silly Walks are here, and their dangerously flailing legs are a menace to poor old Gumby. There's only one option: shoot them all away. *



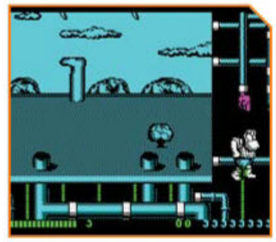
BIO

A sketch comedy show that hadn't aired a new episode in over 15 years would have been an unlikely choice for a licensed game in most circumstances, but *Monty Python's Flying Circus* was no ordinary comedy show. Basing a multi-platform computer game on such a show is a tricky proposition, and Core Design chose to fit *Python* elements into a shoot-'em-up design, casting the player as Gumby from the animated segments. The result was a game which divided opinion, much like the show on which it was based – but just like the show, fans of the game were particularly enthusiastic.



MORE MONTY PYTHON'S FLYING CIRCUS MOMENTS

Over The Edge



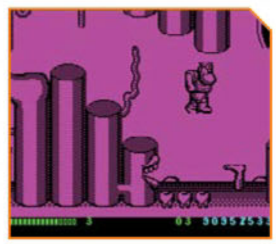
When the game starts up and you take control of Gumby, besides some odd visuals it looks like he might have simply been dropped into a relatively standard game. The illusion doesn't last long, though. As you direct Gumby to the right, he falls off the edge of the backdrop, giving you your first real taste of the game's surreal nature.

Altered States



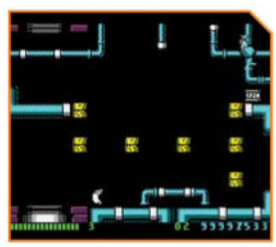
Gumby is a man. Only, quite a lot of the time he isn't. Sometimes, he's a head on a boot, endlessly hopping around the stage. At other times, he's a strange hybrid creature, with his head grafted on to a chicken's body. The strange transformations perfectly capture the surreal and iconic animation style of Terry Gilliam, granting the game a feeling of authenticity.

Portable Portal



You see a hole that you need to go through, but it's located in the top-right corner of the screen. This is a typical gaming problem, which normally involves moving your character towards the hole. However, this is *Monty Python*. If you see an unreachable hole, the solution isn't to move your character – it's to move the hole itself!

Spammity Spam

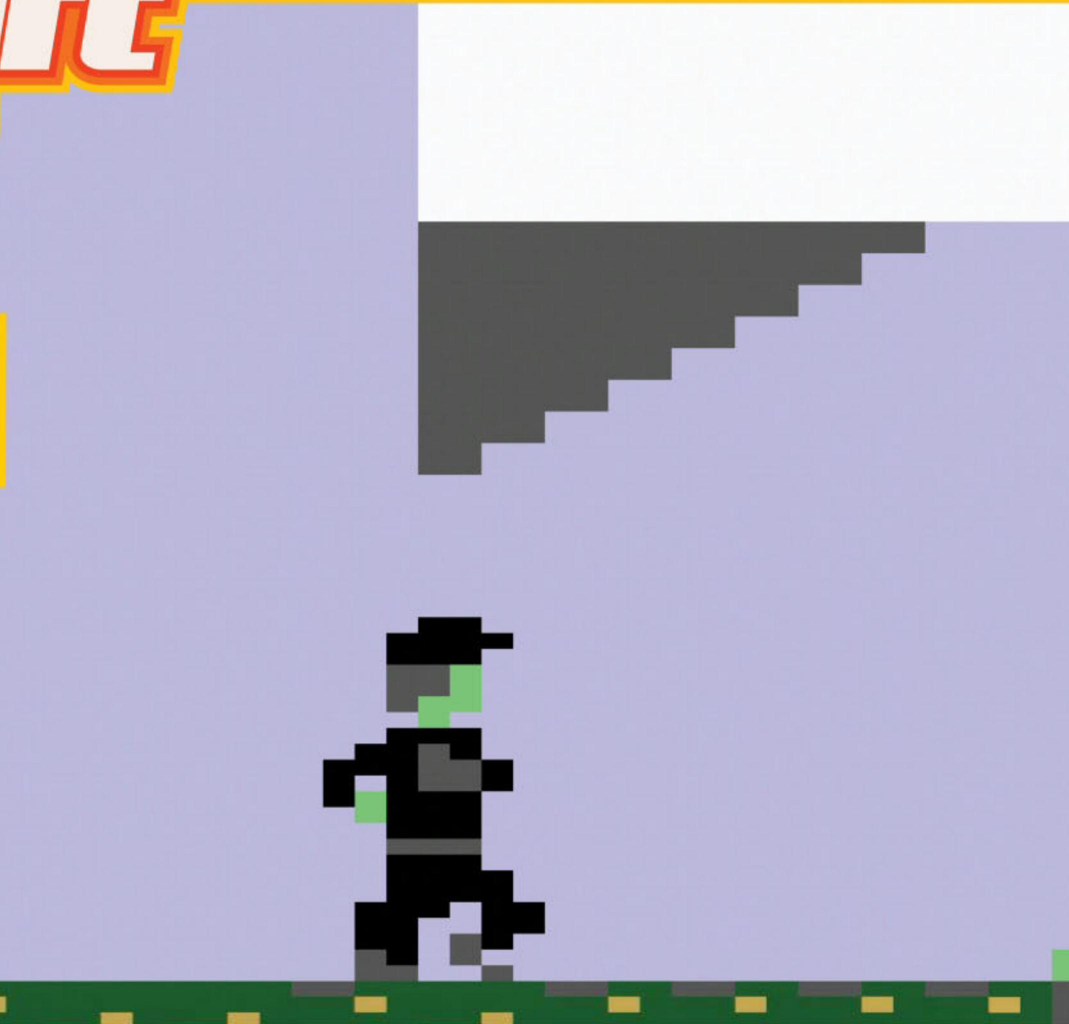


It's all too easy for developers to use generic gaming designs when dealing with licensed properties. To be honest, we've collected enough coins, keys and gems to last a lifetime. Thankfully, Core Design didn't go down this route, instead choosing to use something appropriately abundant in the show as the game's collectable item – tins of Spam, of course.

Minority Report

CLASSIC GAMES YOU'VE NEVER PLAYED





COMMODORE PLUS/4

The Plus/4 was the flagship of 264 series featuring 64K of memory. Other models had just 16K, and most games were designed to run on these machines. But as Martyn Carroll discovers, there were some titles that were worth the extra RAM

BRIDGEHEAD: LEGIONNAIRE 2

■ DEVELOPER: KINGSOFT ■ YEAR: 1986

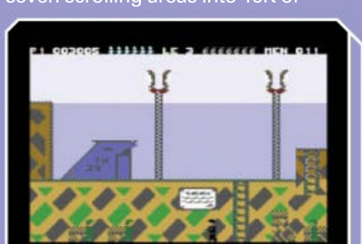
COIN-OP CONVERSIONS FOR the 264 machines were generally poor, take Capcom's *Commando* for instance. Elite's official license was celebrated on most 8-bit machines but the 264 version was a complete misfire. It featured five separate screens (with no scrolling) and could be completed in about a minute if it wasn't for the unfair difficulty level. Far more authentic was *Legionnaire*, a *Commando* clone from German developer Kingsoft that squeezed seven scrolling areas into 16K of memory. The game was released in the UK by Anco Software.

For the sequel, Kingsoft cloned another arcade hit in Konami's *Green Beret*. An official 264 version of *Green Beret* was released, courtesy of Imagine Software, and it was about as welcome as a root canal. Once again Kingsoft administered an unofficial remedy to help numb the pain in the form of *Bridgehead*. The game featured five horizontally-scrolling areas, with the only issue being that the game, the graphics and all the other good stuff couldn't possibly fit into 16K. So a multi-load system was used.

> "Your soldier heads into enemy territory armed with only a knife so get up close and stab, stab, stab"

For Plus/4 owners (or C16/116 owners with a memory expansion pack), Kingsoft developed a special version which featured three extra levels, taking the total to eight, and the entire game loaded in one load. This enhanced version initially retailed for £7.95, £2 more than the standard 16K release, but it was definitely worth the additional outlay if you had the extra memory available, due to its enhancements.

The game itself is best described as a run-and-gun, although you could easily argue with that description. There are no guns for a start – this is the *Alien 3* of action games. Your soldier heads into enemy territory armed with only a knife so get up close and stab, stab, stab. He also has a limited supply of hand grenades, which can be flung at enemies, although these are better used for exploding landmines. So there were no guns, and not much running either as the horizontal scrolling is fairly laboured. The 264 hardware isn't exactly the best at full-screen scrolling but the game moves smoothly but slowly. So with knife in hand and advancing steadily, your soldier is more like Michael Myers than elite marine.



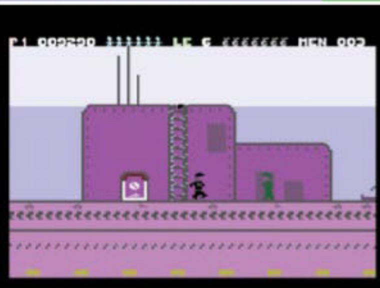
» [Plus/4] There's a manic enemy rush sequence at the end of each stage.



» [Plus/4] The initials JD, tagged on the containers, belong to the game's coder Jorg Dierks.



» [Plus/4] Those devious red baddies will try and blast you with their bazookas.

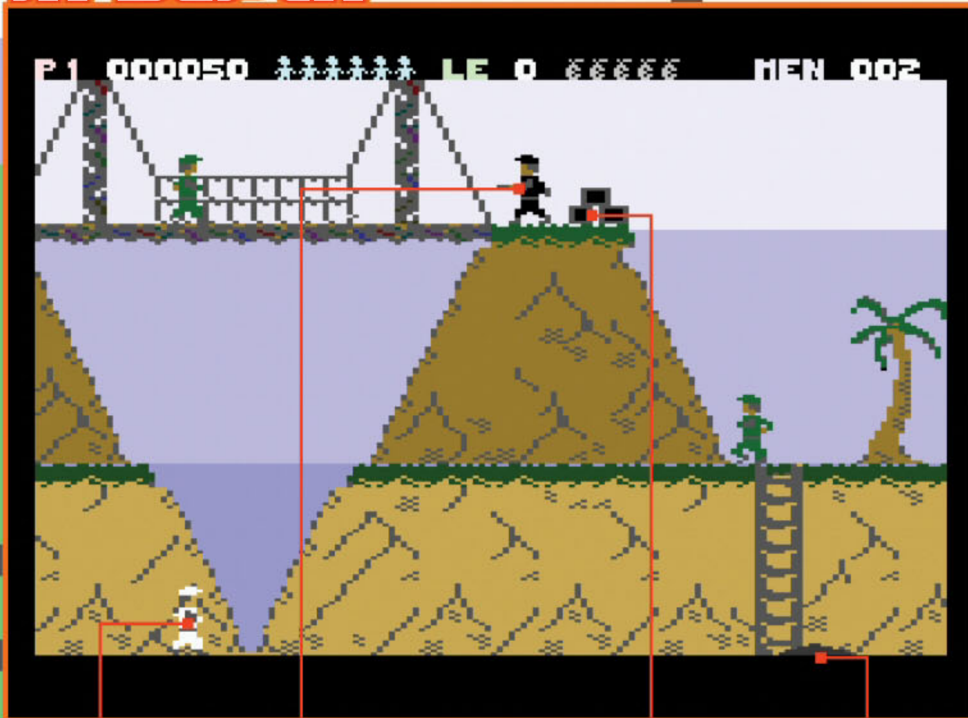


» [Plus/4] "We all live in a lilac submarine," sang the enemy.



» [Plus/4] "Almost there! The enemy HQ is just over this wall.

IN DEPTH



COMMAND AND CONQUER

■ This chap is an enemy commander. You'll find him patrolling levels where he'll hunt you down. Stick it to him as he's worth bonus points.

STABBY JOE

■ That's you, the lone star of this guerrilla thriller. His name is not provided, so given his fondness for knife play this seems like an appropriate moniker for him.

PINEAPPLE STAND

■ Silly enemies, carelessly leaving their supplies for our hero to pillage. As grenades are vital to your progress, you'll need to stock up whenever you can.

MIND THE MINE

■ Concealed landmines litter your route. Sometimes they can be avoided by taking a higher path, but if not, you'll need to use a well-thrown grenade to clear them.

It's certainly challenging, with eight increasingly difficult levels to clear. This is compounded by an enemy rush, which occurs at the end of each level, just like *Green Beret*. The game ends when you clear out the enemy HQ at the end of the final stage, and then you're invited to do it all over again, for kicks of course.

If you're a fan of one-man-army games then *Legionnaire* and *Bridgehead* make an explosive double-act. The Plus/4 version of *Bridgehead* later appeared on the Anco compilation, *6 Of The Best*, alongside some other decent games including *Out On A Limb* and *Terra Nova*. Interestingly, a sci-fi remix of *Bridgehead* was released in Germany under the title *Alien Invasion* (a similar thing happened to Elite's *Commando* which was reworked as *Space Invasion*) due to the war setting being deemed unacceptable by the German establishment.

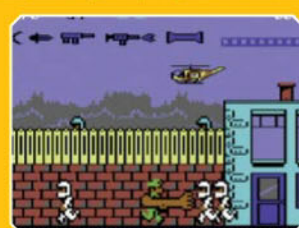
IF YOU LIKE THIS TRY...



GREEN BERET

NES

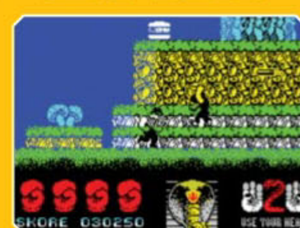
■ The classic coin-op was converted to a number of computers and consoles with wildly varied results. The Commodore 16 version is the pits while the Spectrum version is wonderful. Best of the lot, though, is the NES version, which added a bunch of new stages and extra features to flesh out the arcade experience.



BAZOOKA BILL

COMMODORE 64

■ Games such as *Bridgehead* were clearly preposterous, with one man annihilating entire armies. It was ripe for ridicule and *Bazooka Bill* took a decent shot at it. As the titular Bazooka Bill you will find yourself, smashing enemies with your oversized fists. It's completely over-the-top and that means it's lots of fun.



COBRA

SPECTRUM

■ Like *Bazooka Bill*, this movie license is definitely not playing it straight. There are projectile weapons to grab, but for the most part you run around using Stallone's melon head to butt enemies out of the way. Definitely one of the more memorable insights into the mind of Speccy programmer Jonathan Smith.

Minority Report

ACE

■ DEVELOPER: CASCADE ■ YEAR: 1986



» [Plus/4] Refuelling your craft midair is one of the trickier tasks in the game.



» [Plus/4] Son, your ego is writing cheques that your body can't cash!



» [Plus/4] Flying upside down, taking out enemy ships, like a boss.

■ ***ACE* IS BEST remembered as a Commodore 64 title of some repute, yet the history of this jet fighter game actually stems back to the 264 series.** The archetype *ACE* was released for the Commodore 16 in 1984 (with a version also released for the VIC-20). Author Ian Martin was then encouraged by Cascade bosses to go back and beef up the game for the C64. The result was an advanced edition that featured many improvements and additions (the synthesised speech was particularly impressive).

Fittingly, the C64 game was then ported over to the Plus/4 in 1986, although the reason why may surprise you. According to Ian, a Plus/4 version was incorrectly listed on a multi-format advert for *ACE*, and rather than risking action from the advertising authorities, a Plus/4 version was created. A fortunate accident then, as the Plus/4 version is one of the machine's finest titles. Some detail from the C64 game may be missing but that doesn't detract from it in the slightest. This is not a flight sim but a pseudo-3D shooter with some sim elements. This quickly becomes clear while the horizon is spinning as you're dog-fighting and the game is screeching, "Missile warning! Low altitude! Eject!"

"This is not a flight sim but a pseudo-3D shooter with some sim elements"

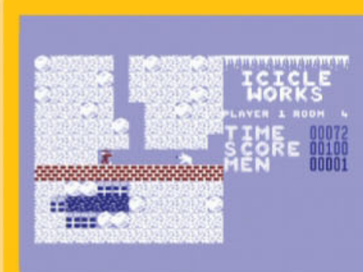
MORE GAMES TO PLAY



» OUT ON A LIMB

■ DEVELOPER: SAM MANTHORPE
■ YEAR: 1984

■ **A charming little** platformer, featuring 20-odd screens of fairy tale fun inspired by *Jack And The Beanstalk*. The original 16K version was split into three parts, each requiring a separate load. The later Plus/4 version, released exclusively on compilations, banished the annoying 'Press Play On Tape' message by repacking the game as a single load. Far from easy, but it's fun discovering what the next screen holds.



» ICICLE WORKS

■ DEVELOPER: DOUG TURNER
■ YEAR: 1985

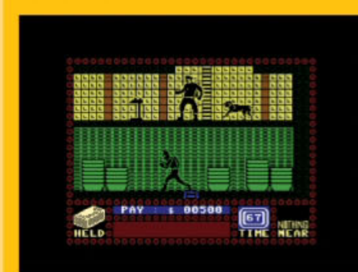
■ **This festive-themed** copy of *Boulder Dash* sees you helping Santa Claus collect up scattered presents while avoiding deadly snowballs, irate penguins and rampaging polar bears. A clone yes, but a very good one with some sneaky puzzles to be found inside the game's 16 caverns. Icicle Works was one of ten titles bundled with the Plus/4 at one point and it's definitely up there with *Treasure Island* as the best of the bunch.



» SAVAGE ISLAND

■ DEVELOPER: ADVENTURE INTERNATIONAL
■ YEAR: 1986

■ **Several of Scott Adams's** adventure games were released for the 264 range, and most of them were basic 16K text-only affairs. A small number, however, featured location graphics and would only run on 64K machines. *Savage Island* was one, with both 16K and 64K versions included in the same release. This was a difficult yet decent adventure that was continued in the less-successful *Savage Island Part 2*.



» SABOTEUR

■ DEVELOPER: DURELL
■ YEAR: 1986

■ **Chosen for two** simple reasons; it's a classic game, of course, and it highlights what the extra 48K of RAM afforded. On the Plus/4 the game is almost identical to the C64 release, which in turn was very close to the Spectrum original. Yet the separate 16K version is so drastically cut-down that it's completely unrecognisable, with the whole game looking like it has been shrunken by Rick Moranis. Play the full-fat Plus/4 version only.

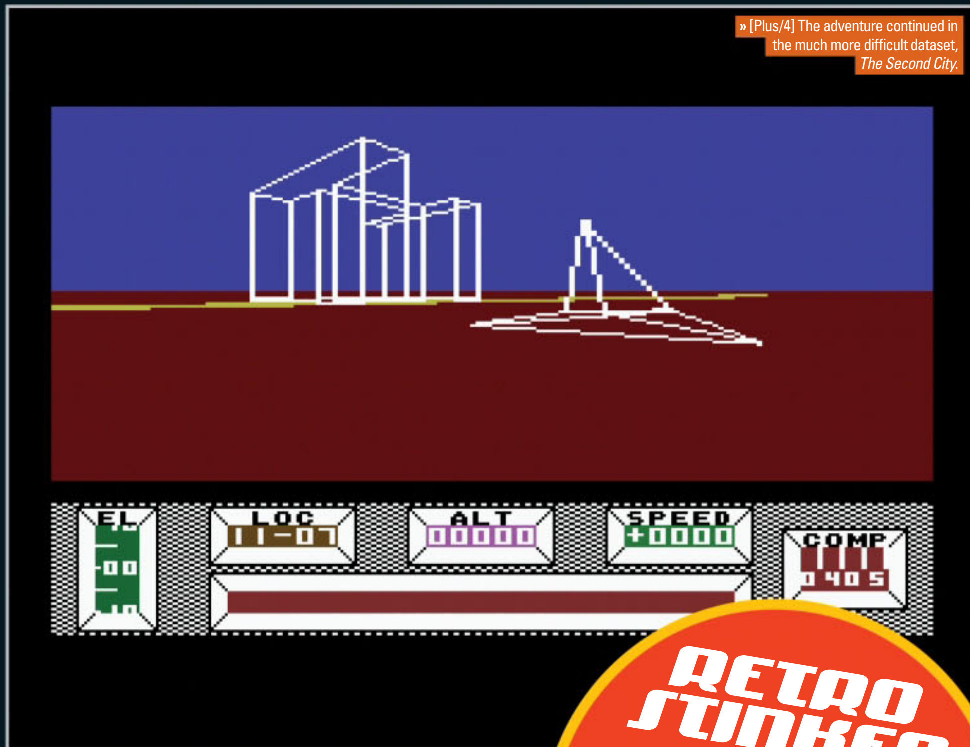
MERCENARY

■ DEVELOPER: NOVAGEN ■ YEAR: 1986

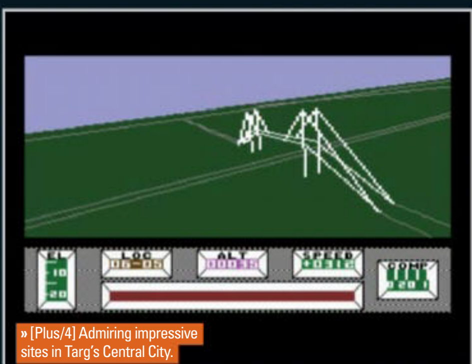
■ **THIS 3D MASTERPIECE from Paul Woakes and Bruce Jordan needs little introduction.** It debuted on the Atari 8-bit in 1985 and was later ported to several other systems including the Plus/4.

The Commodore 64 version surprised many as Novagen managed to get the game running at a decent speed on the computer's 1 MHz CPU. The 264 series' CPU is clocked at 1.7 MHz, so it's hardly surprising that the Plus/4 version runs faster than the C64 release – though not by as much as you might expect. This was largely due to the way video memory was handled by the 264. *Mercenary* on the Plus/4 offers approximately a 25 per cent speed boost over the C64 version, resulting in faster and more fluid visuals. This is most prominent during the opening crash landing sequence, when the planet Targ fills the screen and the city spins into view. The game also uses the 264's extended colour palette to give the world a more natural appearance, which adds to the atmosphere.

Mercenary was a clear hit with Plus/4 owners, and their loyalty was rewarded with the release of *The Second City*, an expansion pack which offered new locations, different challenges and no less sense of wonder.



» [Plus/4] The adventure continued in the much more difficult dataset, *The Second City*.


» [Plus/4] Admiring impressive sites in Targ's Central City.

RETRO STINKER
» JET SET WILLY

■ DEVELOPER: TYNESOFT ■ YEAR: 198686

■ **It pains us** to say it, but the Plus/4 version deserves to be flushed down Willy's toilet. Despite having 64K to play with, many rooms and enemies are missing. The stairs barely work either!



» TERRA NOVA

■ DEVELOPER: ANCO
■ YEAR: 1987

■ **"Welcome to *Terra Nova*,** a journey through the unknown!" booms a Northern-sounding voice when you load this vertical-scrolling shooter. The speech is great, and there's much more of it in the enhanced 64K version compared to the standard 16K game. The scrolling is fast and smooth but the difficulty level is uneven – on later stages you have to continually top up your ammo and fuel to survive!



» SUPER COBRA

■ DEVELOPER: OCTASOFT
■ YEAR: 1987

■ **Konami's arcade sequel** to *Scramble* was ported to a number of platforms in the early Eighties. This belated Plus/4 version arrived in 1987, courtesy of Hungarian software house Octasoft. It's unofficial but extremely true to the coin-op, and the graphics are actually a step up (the main chopper sprite is really well animated). Like the original, it's a tough old game and only the most persistent players will beat all ten stages.



» REALM OF DEMONS

■ DEVELOPER: OCTASOFT
■ YEAR: 1989

■ **This entertaining Hungarian** oddity opens with a rendition of The Beatles' *A Day in the Life*, which is fitting because after playing it for a few minutes you'll feel like you've had a smoke and gone into a dream. Playing as a spaceman armed with a laser gun, you get to fly on a magic carpet, explore the bowels of Hell and escape from a voodoo island. The gameplay is a more traditional mix of shooting and puzzle solving.



» ADVENTURES IN TIME

■ DEVELOPER: KICHY AND LUCA
■ YEAR: 2010

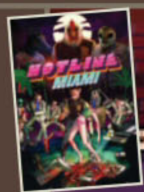
■ **This homebrew platformer** has been voted as the all-time number one game by visitors to the fantastic Plus/4 World website (www.plus4world.com). we liked it too, awarding it 92% in issue 78. It's not hard to understand why as it really is a top quality release, showcasing the quality of arcade-style graphics that can be coaxed out of the Plus/4.

Future Classic

Modern games you'll still be playing in years to come



INFO



- **Featured System:** PC
- **Year:** 2012
- **Publisher:** Devolver Digital
- **Developer:** Dennaton Games
- **Key People:** Gabe Jonatan "Cactus" Söderström – designer, Dennis Wedin – designer

GO DEEPER

- **As with all of Cactus' 50 or so games, *Hotline Miami* was developed in the freely available GameMaker engine.**
- **Cactus actually took to forums on The Pirate Bay to help people who were having problems with pirated versions of the game.**



»[PC] Most shootouts end up with the room packed with dead mobsters

47. HOTLINE MIAMI

We take you on a trip to a seedy Miami, which has been painted with a brush soaked in the neon of Eighties pop-culture (not to mention bucketloads of blood) to argue that it's the perfect setting for this issue's future classic

THE BACKGROUND

Despite having something of a reputation on the indie scene as a prolific creator of short, creative games, developer Jonatan "Cactus" Söderström was a relative unknown before *Hotline Miami*. That was all set to change when Cactus was introduced to artist and musician Dennis Wedin. After striking up a friendship, the pair collaborated on a couple of small projects before turning their attention to a game that Cactus had abandoned back in 2004 – a top down shoot-'em-up where you were simply meant to kill as many people as possible called *Super Carnage*. Taking inspiration from Nicolas Winding Rehn's moody neo-noir thriller, *Drive*, and drug documentary *Cocaine Cowboys* in particular, Söderström and Wedin took *Super Carnage* in a brand new direction, setting it in Eighties Miami and adding a layer of sophistication to its narrative as they refined its mechanics in Söderström's engine of choice, GameMaker. Before long, *Super Carnage* had become *Hotline Miami*.

Indie publisher Devolver Digital would eventually pick up the game after being sent a copy by *Super Crate Box* developers Vlambeer. That proved to be a good decision, as *Hotline Miami* became a huge success both critically and commercially when it released in 2012. So much so that it was not only ported to PS3, PS Vita and PS4, but now has a sequel in development entitled *Hotline Miami 2: Wrong Number*, due this year.

THE GAME

It's top-down perspective and brutal violence means *Hotline Miami* has often been compared to the original *GTA*. There's something in that comparison, but that doesn't quite capture what *Hotline Miami* is about. As you move throughout each stage, bursting into rooms, swinging crowbars and firing shotguns in an attempt to take out every enemy, before being killed for the umpteenth time, you start to realise that *Hotline Miami* is a game that's difficult to describe. In a sense, it is a puzzle game – the perspective you're presented with gives you an overview of every room in a level and every enemy you'll have to take down, inviting you to work out how you're going to guide the nameless, masked serial killer that you're controlling to success. Yet, the


»[PC] We generally prefer melee weapons based on the fact that the sound of guns brings enemies running.



»[PC] It's moments like this where *Hotline Miami* screams, "look what you've done!". Made a bloody mess, that's what.

game revels in the idea that the best laid plans can go to pot and, indeed, some of its best moments arise when it becomes an exhilarating twitch-based action game, when everything goes wrong and you, somehow, by the skin of your teeth, are left standing, surrounded by the broken bodies of your enemies.

Not content to simply be a great action game, though, part of what makes *Hotline Miami* so interesting in that it constantly asks you why that experience of murdering your foes with bottles, knives and all manner of other weapons is so appealing. Employing a surreal, Lynchian approach to storytelling, in which it is not clear what is real and what is not, the game consistently asks you to reflect on the brutality of your actions, making clear that unlike most other violent games, there's no real justification for what you're doing. We'll not go into details as we wouldn't want to spoil anything for any of you who haven't yet played it, save to say that *Hotline Miami*'s odd and mysterious plot is a smart reflection on videogame violence – the appeal of which is, of course, the very thing on which this game is predicated.

If you needed an answer as to why smashing the heads of Russian mobsters with a pool cue is so satisfying, though, the answer to that question is surely part of the experience of playing the game itself. From the precise nature and breakneck speed of its action, through to its wonderful, neon-infused pixel art and pulsating, electronic soundtrack, everything about the game conspires to create something that is aesthetically arresting and seductively exciting.

In short, *Hotline Miami* is one of those rare releases that is masterfully constructed, it is a game where every aspect complements each other perfectly. Whether it's *Hotline Miami's* strong sense of style, the hallucinogenic character of its surreal storytelling, or the exhilarating nature of its twitch-action gameplay that initially wins you over, there's plenty to love about *Hotline Miami*.

WHY IT'S A FUTURE CLASSIC

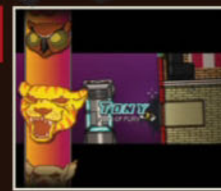
One reason that *Hotline Miami* will stick around is that it's timeless. The retro influences of its pixel art-style means that the game will not suffer like those that opt for cutting-edge visuals as time goes by. Indeed, as a whole, the game is meant to be evocative of a period that's already past – the Eighties - and it'll be as good at that in 20 years as it is now. It simply will not age.

The thing that really ensures *Hotline Miami*'s status as a future classic, though, is just how brilliantly it plays. As you begin replaying levels, you start to experiment with different strategies that allow you to build long combos and gradually realise that there's an excellent high-score game to be found here, just like in classic arcade games of old. The process of refining your runs for higher scores is just as exciting and rewarding – albeit in a different way – as finishing levels was back when you first started.

Thanks to the addicting gameplay, stylish visuals and pulsating soundtrack, newcomers and veterans are going to have their adrenaline set pumping by this game long into the future. *

Things of note

MURDEROUS MASQUERADE



Masks that you unlock during the game bestow abilities upon you. Tony (the tiger mask, obviously) allows you to kill enemies with punches.

START, DIE, REPEAT



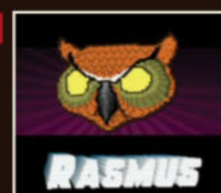
Death comes easily in *Hotline Miami*, but lighting quick restarts serve the dual purpose of ensuring it's not frustrating and encouraging you to play like a psychopath.

SCORE CHASER



When playing for A+ ratings, *Hotline Miami* forces you to throw caution to the wind. You have to expose yourself to enemies and build large combos for high scores.

EYE FOR SECRETS

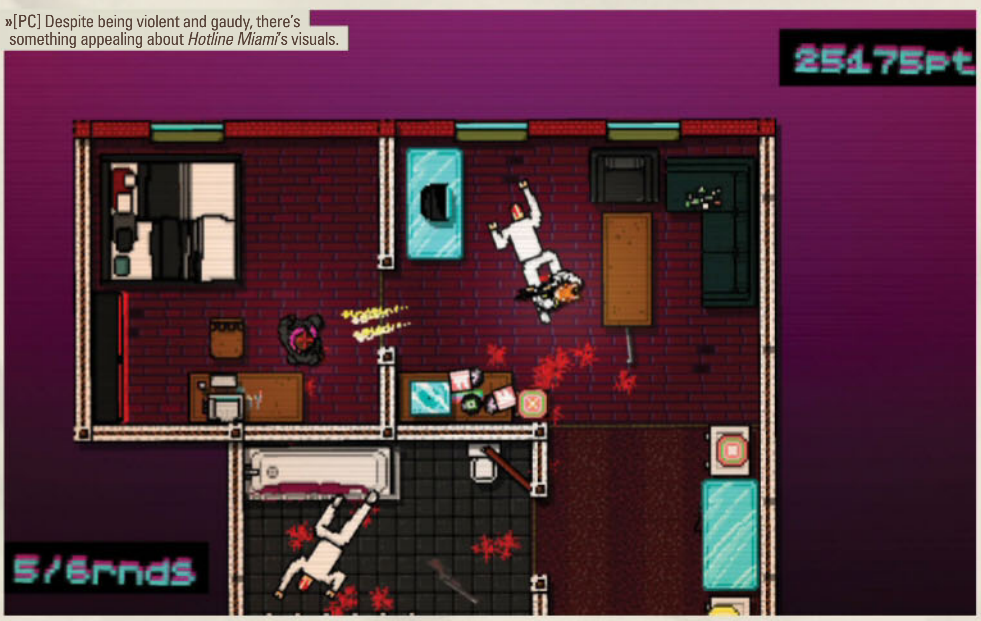


Hotline Miami's got two endings, the second of which can be unlocked by collecting the puzzle pieces hidden in each level. The Rasmus mask will help you find them.

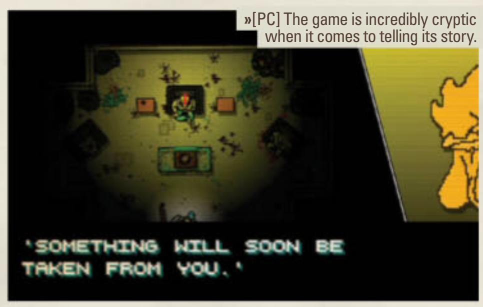
MURDER ON THE DANCEFLOOR



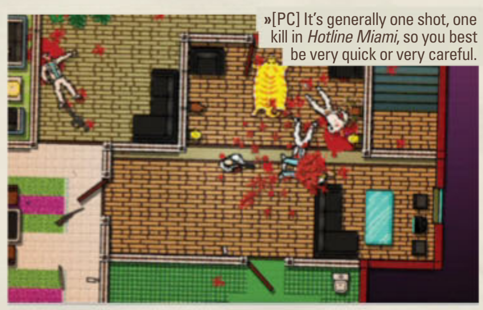
We can't go without singling out *Hotline Miami's* brilliantly curated soundtrack for special mention. It is, quite simply, one of the best in gaming.



»[PC] Despite being violent and gaudy, there's something appealing about *Hotline Miami*'s visuals.



»[PC] The game is incredibly cryptic when it comes to telling its story.


»[PC] It's generally one shot, one kill in *Hotline Miami*, so you best be very quick or very careful.



"ETERNAL CHAMPIONS 101"

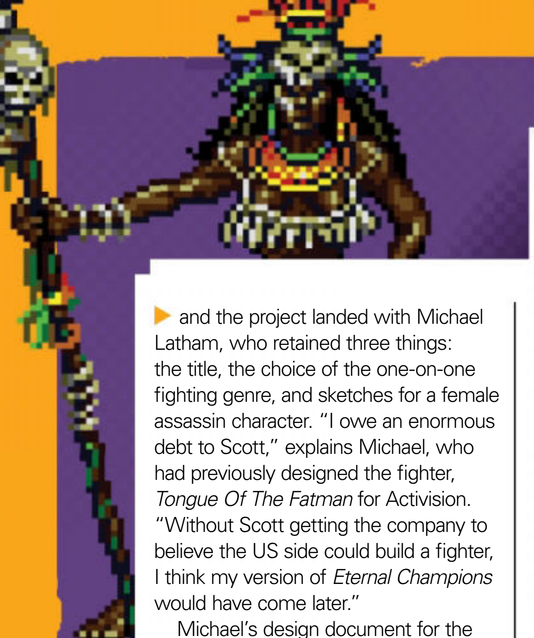
■ *Eternal Champions* and its sequel, *Eternal Champions: Challenge From The Dark Side* are one-on-one fighting games. Unlike most similar games, special moves are limited by your character's Inner Strength gauge, and exhibit effects such as speed boosts and damage reduction in addition to the usual throws and projectiles.



Sega's multimillennial fighting game arrived to great fanfare in 1993, but vanished after just a few years. Nick Thorpe talks to producer Michael Latham about the series' brief life and untimely end

It's a sad fact of human history that those who have the power to affect great change often meet an untimely demise. But this fact does lead to an interesting question: if you could avert the killing of a single historic figure, who would it be – and how would you decide? Luckily you don't have that power, but it has proven to be life's biggest problem for the Eternal Champion, embodiment of strength and protector of good. He's got a group of incredible martial artists with heroic potential stuck in the afterlife, but only has the power to avert the fate of a single one. His unique solution is to have them all fight it out in a tournament out for a chance to live again and change history for the better.

It's an unusually engaging premise for a fighting game, but one which bears little resemblance to *Eternal Champions* as it was originally pitched. The idea was for a Mega Drive fighting game, to be developed internally at Sega Of America, starring larger than life heroic characters with a great deal of humour and a liberal helping of fantasy dwarves. However, the game's original producer Scott Berfield moved on



▶ and the project landed with Michael Latham, who retained three things: the title, the choice of the one-on-one fighting genre, and sketches for a female assassin character. "I owe an enormous debt to Scott," explains Michael, who had previously designed the fighter, *Tongue Of The Fatman* for Activision. "Without Scott getting the company to believe the US side could build a fighter, I think my version of *Eternal Champions* would have come later."

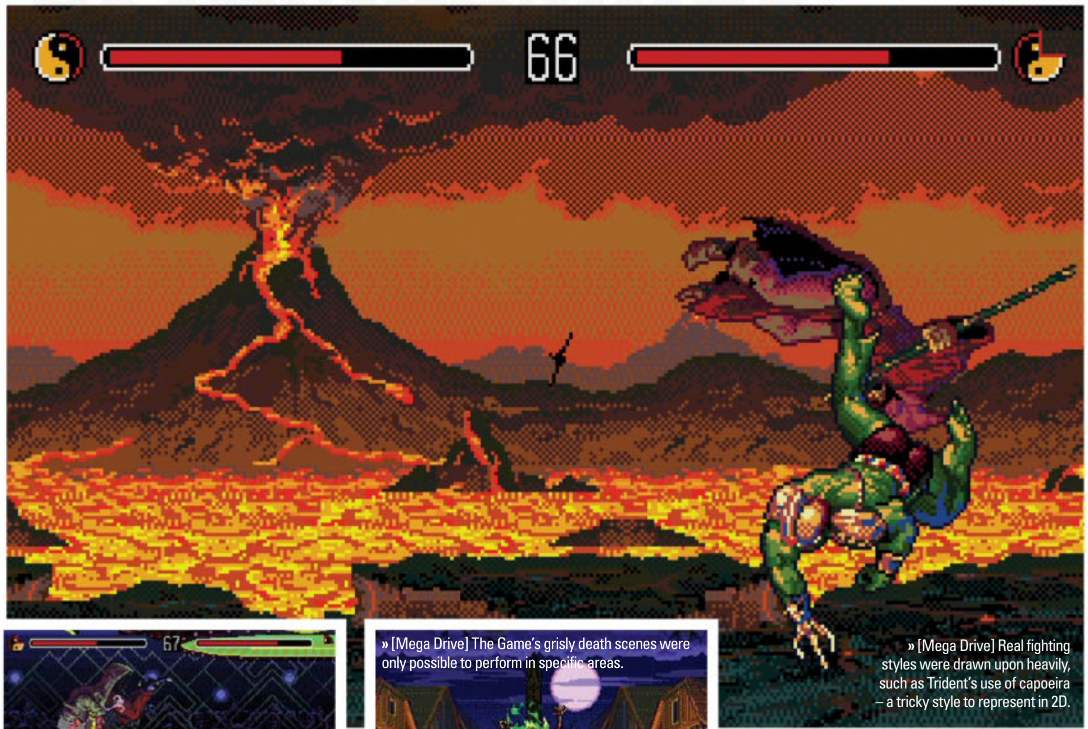
Michael's design document for the game is a fascinating read today. While *Street Fighter II* was an established success by the time *Eternal Champions* had entered production, the one-on-one fighting game was still a developing form – *Mortal Kombat* was barely six weeks old by the date of the draft design document. As a result, the design called for a variety of different features that were innovative for the time, many of which are still rarely seen today, including the option for infinitely-scrolling stages, alternate win conditions based on knockdowns and a comprehensive training mode.

In the end, a few of the fighters made it through to the final product. The first was the limitation on special moves, which became the Inner Strength gauge, a regenerating gauge depleted by using special moves – with greater drain for more powerful moves. Secondly, interactive backgrounds were utilised in two forms. The Battle Room could spice up fights with additional danger thanks to its variety of selectable traps, while Overkills provided unique death moves for each stage. Finally, the battle with the Eternal Champion was unlike previous fighting game bosses – instead of being a strong but otherwise normal character, the Eternal Champion was unique in that he employed four animal forms in a unique fight.

However, the ideas which were dropped were largely omitted for practical reasons. "A *ton* of the cart memory was focused on the characters," Michael explains. The vast majority of moves were based on real martial arts techniques and were visually complex, requiring many frames of animation and large, complex sprites. "This even meant that the programming team got pulled in doing lots of work to compress the characters and ensure the fighting move system was smooth. So that meant less time for all the programming required executing many of the ideas." Indeed, two of the fighters in the game design document didn't make it into the final release, Blast and Chin Wo – and that was even after the game's capacity had been increased to 24 megabits from the originally planned 16, making it Sega's largest first-party release at that time. "Without the move up to 24-meg *Eternal Champions* would have been a flop. We would have had to cut too much."

One of the most notable aspects of *Eternal Champions* is that it has a very high difficulty level, which was an intentional move on the part of the team. "Pretty much every member of the team was into any and all fighting games and we were all *really* good players," explains Michael. "People forget there were many games at this time which you could just slaughter by finding simple patterns to defeat the one player mode and even some characters in the versus mode. So I felt very strong about AI and fighting system design."

Eternal Champions was a sales success and received generally positive reviews upon release. The game

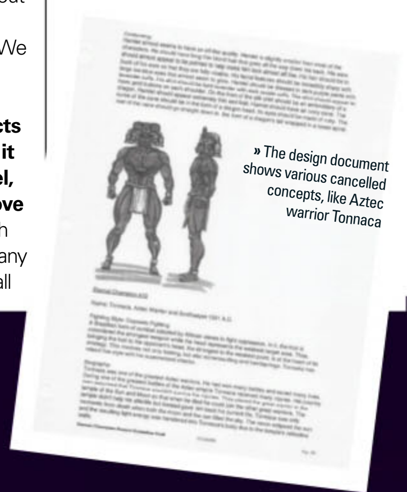


» [Mega Drive] Real fighting styles were drawn upon heavily, such as Trident's use of capoeira – a tricky style to represent in 2D.



» [Mega Drive] Fighters were represented with large, detailed sprites, made possible by the game's 24 megabit cartridge.


» [Mega Drive] The Game's grisly death scenes were only possible to perform in specific areas.


» The design document shows various cancelled concepts, like Aztec warrior Tonnaca

CLASH OF THE CHAMPIONS

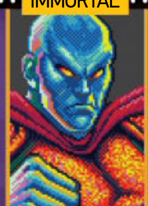
Your guide to the combatants featured in Eternal Champions

IMMORTAL



ETERNAL CHAMPION
Fighting style: Eight Animal Forms

IMMORTAL



DARK CHAMPION
Fighting style: Force Of Nature

50000BC



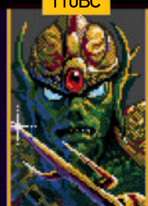
SLASH
Fighting style: Pain

151BC



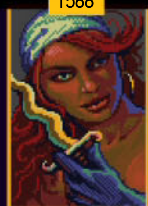
RAMSES II
Fighting style: Hung-Gar Kung Fu

110BC



TRIDENT
Fighting style: Capoeria

1566



RIPTIDE
Fighting style: Kajukenbo



» [Mega-CD] The Senator meets his untimely end atop the Washington Monument, showcasing the increased levels of gore.

attained some extremely high scores – *Sega Pro* awarded the game 94% and the likes of *Sega Magazine* and *Game Players* went higher. In a 97% review in *Mean Machines Sega*, Radion Automatic proclaimed that "with the all-new characters and all-new (and very original) moves, this is like having *Street Fighter 3*." However, such effusive praise was balanced by other reviews which were still favourable, but to a lesser degree – *Mega* and *Sega Power* gave the game 71% and 72% respectively, while *GamesMaster* went for a little higher score at 80%.



Even prior to the release of the Mega Drive version of *Eternal Champions*, the team was planning to bring the game to the Mega-CD and the Game Gear. The latter release never got off the ground, as Michael explains: "This was just a timing issue, and also the fact that Interactive Design studio had now become Sega Interactive. With that, they expanded staff for other projects and Game Gear development no longer made sense for their team. I did consider maybe giving it to another group but I knew how hard it was to get the game into the largest Genesis cart of the time, so a direct Game Gear port seemed likely to end poorly."

However, the Mega-CD version of the game did make it to market, and proved to be a major upgrade over the original cartridge release. "There were many early Sega CD games that just ported the cart and added a lame soundtrack," Michael recalls, explaining his desire to do more with *Eternal Champions* on Mega-CD. "We really wanted lots of hidden stuff for the hardcore fans." Titled *Eternal Champions: Challenge From The Dark Side*, the game focused on the emergence of the Dark Champion, an evil counterpart to the Eternal Champion whose goal is to ensure the world's destruction. To this end, he stole four fighters from time to ensure that the Eternal Champion's contest would run infinitely without succeeding in altering fate.

Challenge From The Dark Side added four new characters as standard, plus a large selection of hidden characters. These included Blast and Chin Wo, back from the cutting room floor, as well as a variety of animals and even a corrupt politician whose fighting style was 'Dishonesty', inspired by the storm over video game violence that resulted in 1993's infamous hearings in the US Congress. This inclusion remains a particular source of pleasure for Michael: "I'm still glad I got to put Joe Lieberman as the Senator character in the game. I like the fact he was not amused."

And those weren't the only improvements. "I wanted to improve the AI," Michael begins. "The team felt strongly about improving the character animations as they didn't have the cartridge limits. Erik Wahlberg focused on improving the fighting system. I added all these various kills and he got the tough job of making all that work including a new combo system." That laundry list of changes made for a much improved version of the game, one which is a smoother and more forgiving experience – though the difficulty does still tend to be rock hard.

The other noticeable change in *Challenge From The Dark Side* is a much darker, bloodier tone. "I think I was realizing that many of Sega's game players were now adults who grew up on Atari," explains Michael. "I felt that *Eternal Champions* and its path was always dark and very story focused. With the CD release I had an ability to tell that story more. Also, don't forget the idea is that the Dark Champion is influencing all that is happening. Unlike the Eternal Champion who is the positive side of balance, the Dark Champion is his yin to his yang. With him comes the shift in tone." This resulted in the inclusion of various additional death moves, many of which were much bloodier than those in the cartridge game. The most striking of the new fatal techniques were the "cinekills" – special kills which showed the Dark Champion ending the ▶

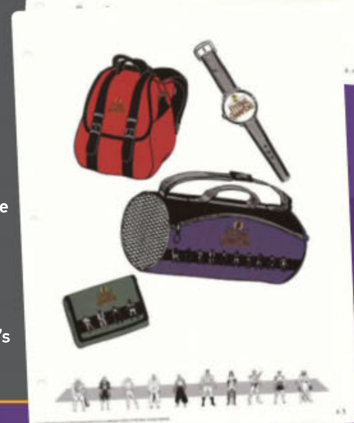
ETERNAL EPHEMERA

The plans for Sega's Eternal Champions merchandise

The *Eternal Champions* design document shows that there were initial designs for a great deal of *Eternal Champions* merchandise, from clothing and bags to wristwatches and mugs. It has also been noted that plans were in the works for comic books and cartoons. Most of this didn't pan out due to the cancellation of the series, but a few pieces of merchandise did manage to escape prior to that. Two adventure game books were released, titled *The Cyber Warriors* and *Citadel Of Chaos*. Additionally, an LCD game titled *Eternal Champions: Special Moves Edition* was produced with Michael's assistance through the Sega Toys division.

An *Eternal Champions* series ran in the UK's *Sonic The Comic*, featuring art from John Haward and scripts by Michael Cook, both better known for their work on *2000AD* and Marvel properties. This featured an altered premise, in that the *Eternal Champion* had resurrected all nine fighters and required them to work together across time to save the world. The initial six-issue run focused on the nine fighters attempting to stop the Nakano Corporation's research into Bio-Key weaponry. The strip proved popular, and gained a standalone special edition as a result. The second run took place across four issues, featuring Shadow and Larcen tangling with the latter's former boss in prohibition-era Chicago.







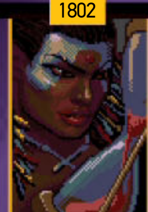
1692
XAVIER PENDRAGON
Fighting style: Hapkido Cane Fighting



1692
THANATOS
Fighting style: Fate, Time And Fisticuffs



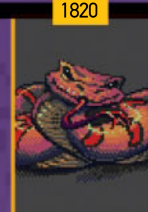
1692
HOOTER
Fighting style: Owl-Kwon Do



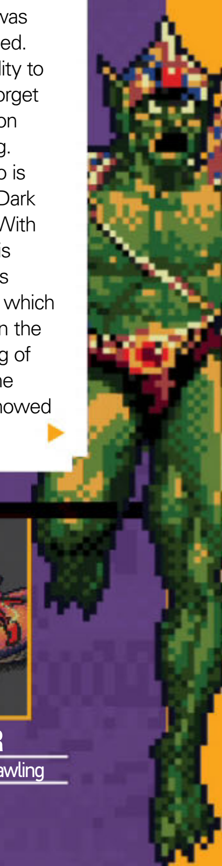
1802
RAVEN GINDAR
Fighting style: Hsing-I Kung Fu / Tae Kwon Do



1815
CHIN WO
Fighting style: Kung-Fu



1820
SLITHER
Fighting style: Brawling





FORGOTTEN FIGHTERS

A selection of other contenders that have fallen by the wayside



WORLD HEROES 1992

■ ADK's fighter is best remembered for its exciting Death Match mode, in which arenas were filled with traps such as spiked walls and mines – not unlike *Eternal Champions*' battle room. Sadly, later instalments dropped this mode.



ART OF FIGHTING 1992

■ The Spirit gauge in this SNK series serves a very similar function to the Inner Strength gauge in *Eternal Champions*. While the series met its unfortunate end in 1996, its cast of fighters live on the crossover *King Of Fighters series*.



TOBAL NO 1 1996

■ Coming from respected RPG house Squaresoft, it was unsurprising that *Tobal No 1*'s substantial single-player mode came in the form of a light quest mode. After a single Japan-only sequel, the series ceased to be.



FIGHTING VIPERS 1996

■ This Saturn-era Sega game featured fighters that all wore body armour. Too much punishment would break the armour, leading to vulnerability. The sequel added one-hit Super KO moves, which won entire matches on their own.



BLOODY ROAR 1997

■ Hudson Soft's flagship fighting game, also known as *Beastorizer*, featured characters that could transform into powerful animal forms during the match. The series concluded with the PlayStation 2 release of *Bloody Roar 4* in 2003.

fighter's life in an FMV sequence.

Despite its improvements, *Eternal Champions: Challenge From The Dark Side*'s 1995 release was met with a slightly less positive critical response than the cartridge-based game, though it still received high scores from the likes of *CVG*, *Sega Power* and *Next Generation*. As expected for such a late release on Sega's struggling add-on, the game sold in lower quantities than its cartridge counterpart and now fetches a reasonable price amongst collectors, as much for its quality as its scarcity.

One of the strongest features of the *Eternal Champions* fighting games was the character design and scenario writing, and this was something that Michael saw potential in. "I did pitch we could do other style games using the characters. It became clear that Shadow and Larcen were quite popular so I wanted to do stuff focused on them." The first of the spin-off games was *Chicago Syndicate*, a scrolling beat-'em-up for the Game Gear. The game stars Larcen Tyler in an alternate history, in which he successfully avoided the bomb blast that proved fatal in the main series. Turning his back on his previous life of crime, Larcen attempts to clean up the streets of prohibition-era Chicago by taking down the six crime bosses that control the city.

"*Chicago Syndicate* was something I wasn't involved with, other than having to allow someone else to execute the idea of having a Game Gear game staring one of the *Eternal Champions* characters," Michael explains regarding his distance from the first *Eternal Champions* spin-off. "I was under pressure to not lead or design games as I was running Omega, the largest US dev group, Test, QA, working directly with Operations, and I was even moonlighting in Sega Toys." As a result, the task of making the game fell to the UK-based studio Climax Group.



» [Game Gear] We're not sure why Larcen's jacket and hat are green. Maybe he's a big fan of The Riddler?

The game boasts a fairly ambitious non-linear design, in which you can choose to attack the different criminal organisations based on their current strengths and weaknesses in categories such as morale, munitions and number of thugs. These are affected by various events which you can keep track of in the newspaper at Larcen's HQ, such as deliveries, inter-gang skirmishes and Larcen's own clean-up operation. Larcen actually retains many of his moves from the fighting games too – even the Game Gear's start button is pulled into the action as a third attack option. However, you only have one in-game year in which to accomplish your task, and everything from researching the gangs to healing up between encounters takes up time.

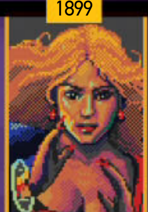
Sadly, *Chicago Syndicate*'s potential went unrealised. It's visually quite nice (though there are only few types of enemies) and the gang mechanics provide an interesting strategic wrinkle. However, the fighting itself is awkward and unsatisfying. The most major problem is that Larcen can't turn and face left, but will be frequently attacked from behind. Additionally, the control scheme tries to cram too many moves

1849



DAWSON MCSHANE
Fighting style: Shotowando

1899



JETTA MAXX
Fighting style: Savate / Pencak Silat

1902



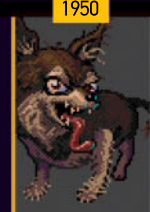
ZUNI
Fighting style: Monkey-Fu

1920



LARCEN TYLER
Fighting style: Praying Mantis Kung-Fu

1950



YAPPY
Fighting style: Shi Tzu Fu

1955

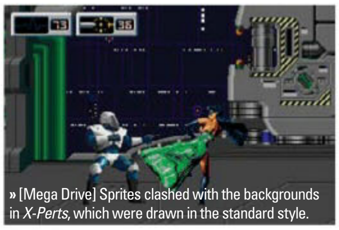


THOMAS "BLAST" CHAVEZ
Fighting style: Green Beret Technique



onto too few buttons and the vast majority are unnecessary as almost all of the enemies can be handled simply by abusing crouching attacks. "The Larcen game just crushed me," Michael tells us, pulling no punches. "I couldn't have disliked the developer more and the end result even more – that was saying something, given my view of the developer."

Shadow Yamoto's game was titled *X-Perts*, and had a higher profile than *Chicago Syndicate* thanks to its Mega Drive release. Michael had more involvement in this project, as he explains: "Shadow was the most popular female character so I had thought about what to do with her. Her storyline made natural sense for a standalone as her history was one of being a corporate assassin. So I had played around with the concept of what that game would be like and came up with a super-simple concept of her being on a mission with a couple new original characters in a side-scrolling fighting game. I had all kind of thoughts about how you would take the *Streets Of Rage* concept to the next level."



» [Mega Drive] Sprites clashed with the backgrounds in *X-Perts*, which were drawn in the standard style.



» [Mega Drive] Having objectives scattered around a large, non-linear level is a reasonably good idea.

"There was a deep concern that we didn't have anything in the pipeline that had a similar look"

Michael on realising Blast Processing couldn't compete with rendering

With the Sega Interactive team unavailable to take on the project, Michael turned to his colleague Tony Van, who worked in Omega as an Executive Producer at Sega. "Tony is an extremely talented game producer and designer, so I knew he would be a good choice to take on the project as again I was being pushed to do other things." Abalone was a small team, but its task became one of epic proportions thanks to competition from an external project.

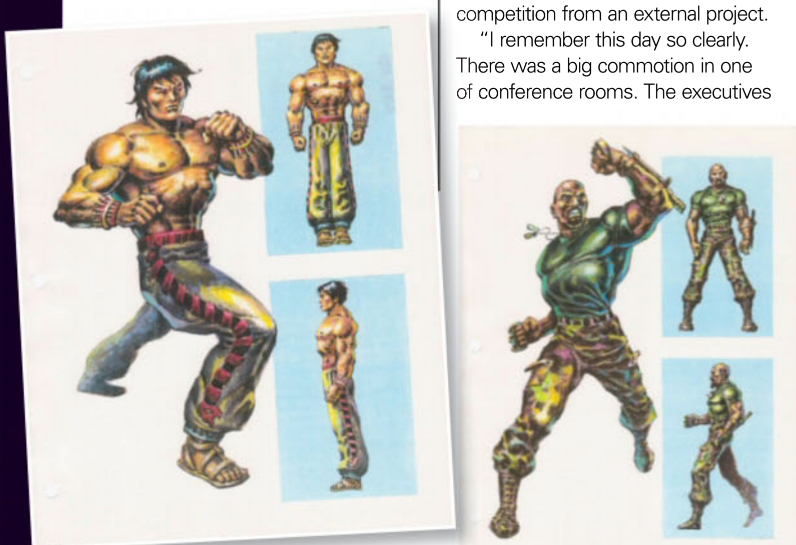
"I remember this day so clearly. There was a big commotion in one of conference rooms. The executives were watching gameplay from *Donkey Kong Country*. This was a big 'oh crap' moment. Seeing a game with all the key graphics being renders blew people away. There was a deep concern that we didn't have anything in the pipeline that had a similar look. It was the new Mode 7 problem and Blast Processing wasn't going to solve this. So I showed a prototype of *X-Perts*. It was full-render stuff – Shadow with god knows how many frames of animation, but I'm sure there wasn't a byte of data left beyond this walking and graphic demo with this amazing interactive background. Of course, the executives wanted this game yesterday. At this point Tony is still working out basic design and suddenly it's one of the most key things we need to ship."

The combination of high pressure and low resources proved disastrous. "Tony was pulling his hair out trying to make a rapid design and get this tiny development company to create a next generation game, but of course it would have taken all of Sega Interactive to make this happen. We did try and pitch to pull part or all of them but that wasn't going to happen." When it became clear that the game wasn't going to live up to expectations, things got worse. "Any marketing, PR, or other key support was removed. At the same time the developer was falling apart under the pressure."

The result was that *X-Perts* didn't work when it arrived in 1996. The sprites didn't look bad, but they had limited combat capabilities. Also, the gameplay was hamstrung by an awkward system of objectives with objectives frequently interrupting the flow of the game. "Would Tony and I claim to be proud of *X-Perts*? Not really. But what I can tell anyone who bought the game is that Tony worked himself so hard to get what he could in there. To even explain how impossible that was would be its own book."

X-Perts marked an unfortunate end to the series, but it wasn't meant to be the case, after all, *Challenge From The Dark Side* had promised a sequel and plans were underway to develop a third chapter of the main fighting series for the Sega Saturn. However, shortly after Michael had finished his work on localising *Virtua Fighter* for the 32X, the situation would change for the worse. "Not long after, Joe [Miller] asked me to join him in his office. He filled me in that *Eternal Champions 3* was dead. Sega Japan had a deep concern that sales in America and Europe of *Virtua Fighter* weren't what they should be and that Sega Of America and Sega Europe were too focused on *Eternal Champions*."

Since then, *Eternal Champions* has been left dormant by Sega. While fighting games have moved on considerably since *Eternal Champions*, it had some unique ideas which modern games could benefit from adopting. For Michael, it's all about delivering a rich single-player experience. "Why shouldn't fighting games have a fully vibrant world with deep story lines? Why can't the single-player mode of a fighting game be more than a practice mode?" Having slogged through way too many fighting tournaments arranged by evil corporations, we are inclined to ask the same thing. *



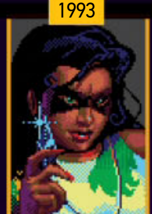
» Chin Wo and Blast were cut from the Mega Drive game due to limited ROM capacity, but resurfaced on the Mega-CD.

1967



CRISPY
Fighting style: Egg Fu

1993



SHADOW YAMOTO
Fighting style: Taijutsu

1995



SENATOR
Fighting style: Dishonesty

2030



JONATHAN BLADE
Fighting style: Kenpo

2100



MIDKNIGHT
Fighting style: Jeet Kune Do

2345



RAX COSWELL
Fighting style: Muay Thai Kickboxing

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Jez San

What cherished games would you take to the island?

From the seminal Starglider to being recognised by the Queen in the New Year Honours List, Jez San's career in the videogames business has had wings. Paul Drury hears about his thirty-year flight

Over the last ten years, we've marooned some pretty big names in the videogame business on our digital desert island, but this is the first time we've welcomed someone with an OBE ashore. So, Was Jez San surprised when he received a letter saying that he was to get a gong from Her Majesty The Queen?

"I assumed it was a practical joke from my practical joking friends," he chuckles. "I received the OBE from Prince Charles at the palace and as he shakes your hand, he chats to you like he knows you! I don't know if he has an earpiece with someone briefing him but he said, 'Oh my boys love *Harry Potter*', because somehow he knew I'd been involved in a *Potter* game..."

It was a well-earned acknowledgment of the distance Jez had travelled from bedroom coder, to company director and industry figurehead via million dollar Nintendo deals. His journey began when his globe-trotting Dad presented him with a TRS-80 Model 1 for his 11th birthday in 1977, giving him a head start in the emerging world of home computers. He was an early adopter of the BBC Micro in 1981 and he took up a Saturday job in a local computer shop, soldering up Model As to become superior Model Bs. "We sold shitloads," he smiles.

Jez's first published game was for the Commodore 64, though. Published in 1984, *Skyline Attack* was a scrolling shooter, which obviously owed a debt to *Defender*, from the odd array of insect-like foes you must battle to the satisfying sound of your laser fire. "Actually its claim to fame was that it was the first game that had another game to play while it was loading," he notes. "You could play a game of *Snake* while you were loading the main game. Some people cruelly said that *Snake* was the better game…"

Though his debut was a competent 2D blaster, Jez clearly had his sights on the third dimension. He helped out with the C64 conversion of *Elite* and, in a rather ambitious move for a schoolboy, tried to negotiate the rights to convert *Star Wars* to home micros. "'They didn't know I was a sixteen year old kid," laughs Jez. "I was just a guy with a British accent! I was in negotiation with their lawyers for quite some time… the second I found out I couldn't get the rights, I knew I wanted to do my own game like it, with a different storyline and not on rails but with a 3D free-roaming world."

So began two years of work on what would become *Starglider*, Jez's first major hit. Largely coding alone, with some help with the 3D modelling and Dave Lowe providing the music, the game surpassed its *Star Wars* inspiration and offered an expansive, combat-heavy flight sim above the planet Novenia. Released across 8-bit platforms in 1986 – *Crash* magazine named it as its Game of the Year – the Amiga and ST versions followed the year after and included a nifty bit of cross-platform innovation. "I learnt 68000 assembler and programmed the 3D system on a classic Mac in readiness for when the Commodore Amiga and Atari ST computers came out," explains Jez. "They both have the same CPU so I decided to treat them as one system. I wrote special code in *Starglider* that actually ran the same game on both the Amiga and Atari computer and I even created a disk format so that the same retail disk would boot on either system. That had never been done before. Unfortunately it backfired because it meant that retailers ordered half as much because they knew it would work on both systems! Rainbird started stickering the boxes as the Atari ST version or Amiga version when actually they were identical in every way!"

Nevertheless, *Starglider* sold in huge numbers and a generous royalty payment from Rainbird (Jez got £2 for each of the 200,000 copies he estimates were shifted) meant he could expand Argonaut into a full-fledged development studio. "The early computer game creators who were one man bands like me, stayed one man bands for quite a long time," says Jez. "They were earning similar money to me but they were keeping it for themselves instead of paying a team. They got to buy their fancy cars and nice houses or

Trivia

While still at school, Jez hacked into the Essex University computer system to play *MUD* [Multi-User Dungeon], a very early MMORPG. If you ever encountered Zaphod the wizard online, that was Jez.



[SNES] King Arthur's World provided medieval machinations at a decidedly stately pace



> “The President of Nintendo asked me how much I wanted to make 3D games for them. I thought of the biggest number I could possibly think of which was $1 million. Then I doubled it”

Jez discovers if you don't ask, you don't get...

FIRST JOB
Hacker!

CURRENT JOB
Angel investor in technology companies

FAVOURITE FILM
Blade Runner

FAVOURITE ALBUM
Thriller by Micheal Jackson

FAVOURITE BOOK:
Cards as Weapons by Ricky Jay

FIRST COMPUTER/CONSOLE
TRS-80

FAVOURITE COMPUTER/CONSOLE
SNES or BBC Micro

BEST GAMING ACHIEVEMENT
Completing *Super Mario World* before anyone else!

BEST-SELLING PRODUCT:
Starfox

BEST HOLIDAY
My honeymoon on North Island in the Seychelles

WHO YOU WANT TO BE STRANDED WITH
If I said anyone other than my wife Natasha, I'd be in big trouble.

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SEX
M

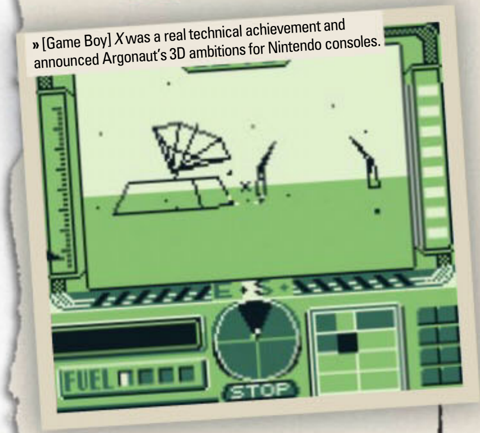
NAME
Jeremy 'Jez' San

DATE OF BIRTH
29.3.1966

PLACE OF BIRTH
London

BIOGRAPHY
Jez San set up Argonaut Software in the early Eighties, the name inspired by Sixties stop-motion epic *Jason and the Argonauts*. The company enjoyed early success with 1986's Starglider and its sequel and prospered through a highly profitable collaboration with Nintendo in the Nineties.

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<



» [Game Boy] *X* was a real technical achievement and announced Argonaut's 3D ambitions for Nintendo consoles.

whatever they were doing… I was building a team which at the time maybe didn't seem the wisest move but I thought that was the way things were going. I thought that one great programmer couldn't make a whole computer game for much longer and I was right, you needed teams… I just had to wait a while before I got my nice car!"

Jez duly hired a dozen team members to help develop *Starglider 2*, released in 1988, which boasted solid 3D polygons on the 16-bit machines and scored a whopping 98% in *Zzap!*. Managing a team certainly presented its challenges for Jez but bringing together a group of talented people allowed Argonaut to develop multiple games simultaneously and they weren't averse to taking on more routine conversion work – *Race Drivin'* and *Days Of Thunder*, for example – to help pay the rent. "It was a necessary evil," concedes Jez. "You still have to pay the team whether you've got a hit game and royalties flowing in or not! You need to keep the work coming in so you can have another go at creating an original hit. It's the equivalent of writing jingles for adverts if you're a musician. It gives you time to do the interesting stuff..."

And when it came to interesting, Argonaut's security-skirting Game Boy work was definitely worthy of attention, particularly from Nintendo. Jez wanted his team to develop for consoles and having successfully created an unreleased vector-graphics version of *Starglider* on the NES, had their sights on Nintendo's forthcoming handheld. He cheekily showed an Argonaut *Tetris* clone running on the Game Boy to a senior Nintendo staff member at a CES show, proving Argonaut had cleverly circumvented Nintendo's copyright protection system using just one capacitor and one resistor. "Their world fell apart," he smirks. "Their multibillion dollar protection scheme, the thing that stopped developers like us making games for their system, didn't work! So I got back to England a few days later and got a phone call from Nintendo saying, Come to Kyoto tomorrow morning, we want you to meet Mr Yamauchi, the President."

It was an offer Jez couldn't refuse and the Godfather analogy continued when he arrived at Nintendo HQ, he was ushered into a boiling hot room and the aging President was wheeled in by his daughter. "He felt like a mafia boss to me," whispers Jez. "She was his translator and he effectively [said], We want you to make 3D games for Nintendo and we want you to teach us how to make 3D games. He asked me how much I wanted and at this point I thought of the biggest number I could possibly think of which was $1 million. Then I doubled it. I nervously said '$2million', thinking he's going to say go away you English foreigner but he said yes! I realised I probably could have named any number…"

So began a mutually fruitful relationship between Argonaut and the Big N. Jez would fly back and forward between England and Japan, giving lessons in creating 3D games to Nintendo staff. He stood in a classroom, pointing at the whiteboard, with a translator helping the eager pupils to learn


» That's a WITCH computer in the background, the oldest working digital computer!

Praise for Jez

Here's what **Retro Gamer** has to say about Jez Sans' games...





Darran Jones
From the majesty of *Starglider* to the brilliant *DMC: Devil May Cry*, Jez San has been involved with a number of innovative and creative games. If I had to pick just one game, I'd go with *Starfox*. It was revolutionary back in the day (if you were a SNES owner) and I happily paid its high import cost (£90).





Paul Drury
From the seminal *Starglider* to the underrated *Enslaved*, Jez has been involved with many impressive titles during his long career. He's a larger than life character too, always willing to talk about everything to do with games and tech, and in case you were wondering, we did curtsey when we met him.

Timeline

1984



SKYLINE ATTACK
■ **YEAR:** 1984
■ **FORMAT:** C64
Jez's first game was this slick *Defender* clone, featuring famous landmarks. The urge to blast the Houses of Parliament on level 1 is, of course, strong.

1986



STARGLIDER
■ **YEAR:** 1986
■ **FORMAT:** Various
This combat sim even came with its own novel. The sequel was a step-up on the 16-bits but kudos to Rainbird for squeezing it onto the Speccy.

1992



BIRDS OF PREY
■ **YEAR:** 1992
■ **FORMAT:** Amiga/PC
An impressive flight sim with a huge map and a host of aircraft to pilot. Allowing you to choose sides in the Cold War is a nice post-Glasnost touch.

1993



STARFOX
■ **YEAR:** 1993
■ **FORMAT:** SNES
Argonaut's skill, both in 3D and chip design, helped make this shooter one of the best games on the SNES. All together now, "Do a barrel roll…"



> “I was in negotiations to get the Star Wars licence for home conversions. Their lawyers didn’t know I was a sixteen year old kid!”

Jez soon discovered these weren’t the lawyers that he was looking for…



» [Amiga] Given its mastery of 3D, Argonaut were a sensible choice to handle the Amiga and ST conversions of Atari’s coin-op.

3D from first principles to advanced coding techniques. “The translator wasn’t quite up to it,” he acknowledges. “She wasn’t just translating English, she was trying to translate geek! It was hard to find the right Japanese words for these very specific programming terms…”

Somehow it worked and the first fruit was *X* for the Game Boy. Dylan Cuthbert, the first Argonaut employee to head over to Kyoto, led the team that produced this technically impressive title, though it was *Starfox* (released as *Starwing* in the West) that really showed the potential of the Nintendo-Argonaut partnership. Having got a wireframe version of Starglider running on the Super Nintendo, Jez had to convince Nintendo that if the new console was really going to fly into the third dimension, they would need to create a bespoke chip. “I made it up on the spot,” sniggers Jez. “I said we would design a chip that would make it run ten times faster and do stuff like they did in coin-ops. They said, Great, do it! I had to go back to my team and say, ‘Erm, guess what guys? We’re doing a 3D chip…’”

Originally dubbed the MARIO chip, which stood for Mathematical Argonaut Rotation IO chip, it was later renamed as the Super FX chip by Nintendo, a fully programmable RISC processor that powered Starfox to huge critical and commercial success. There was even talk of the chip being included in the American model of the SNES, but in the end it was used to enhance a small but noteworthy number of releases. *Stunt Race FX* and *Yoshi’s Island* all benefitted from having the Super FX chip installed in their cartridges and Argonaut even utilised the technology to develop a 3D title of their own: *Yoshi’s Racing*.

“It was actually a 3D platform game,” explains Jez. “We showed it to Miyamoto-san just after he’d done *Super Mario World* and he thought it was great but Nintendo told us we couldn’t use one of their characters. We changed the main character to *Croc*, which was a huge hit for us, but it took years to make because we ran out of money and *Mario 64* came out before our game. And I’m telling you, it looked identical to the Yoshi game we’d shown them! I bumped into Miyamoto at E3 the year *Mario 64* came out and he said, ‘Thank you for the idea for a 3D platform game and I’m so sorry we didn’t do it with you…’”

Hacked Off

If you remember the much loved TV programme *Micro Live* from the Eighties, or at least read our recent feature with presenter Fred Harris, you may recall the famous on-air hacking of the shows email account. “That was me,” declares Jez. “Some friends of mine actually were the ones that got credited for it because they hacked into it too and two messages came up when John Coll logged into his account. I had put this poem on [entitled ‘Hackers’ Song’, celebrating the joys of hacking in two quatrains] and they messaged him straight afterwards saying ‘Hi from Oz and Yug’. They got all the credit for the hack and I remained in the background for decades.” Another retro mystery solved by your **RG** sleuth, dear readers.

San on San

Jez picks his three favourite projects.



■ **STARGLIDER**

It was a very special game for me. It was exclusively me writing it – I did have a few people helping with elements but I was the only coder. It was the game that got me my start and allowed me to hire a team that went on to bigger things.



■ **CROC**

It was very significant for Argonaut to do a character based game with a story. We were known as the technology guys that could do 3D graphics better than anyone but this brought together a creative quality with the tech.



■ **STARFOX**

The game marked the start of a relationship between us and Nintendo. They’d entrusted a third party company to work inside their offices in Kyoto, which was something new for them… and of course we got to work on the Super FX chip!

» [SNES] Go wild with *Stunt Race FX*.



1994 — 1997 — 2003 — 2007

VORTEX
■ **YEAR:** 1994
■ **FORMAT:** SNES
Emerging after Argonaut’s relationship with Nintendo ended, this title featured giant morphing robots and Super FX chip enhanced visuals.



CROC
■ **YEAR:** 1997
■ **FORMAT:** PS/Sat/PC
An early 3D platformer and a big hit for Argonaut. Jez reveals that *Croc* may actually have inspired the mighty *Super Mario 64*.



I-NINJA
■ **YEAR:** 2003
■ **FORMAT:** Various
An underrated little title, with a distinctive visual style and some clever gameplay ideas. He may look cute but this ninja still has shurikens that come keen…



HEAVENLY SWORD
■ **YEAR:** 2007
■ **FORMAT:** PS3
Its action may have been short but its visuals were seldom less than spectacular and it established Ninja Theory as a major PlayStation developer.



DESERT ISLAND DISKS

Readers' Questions

Merman: What has been your favourite hardware to develop for?
I'd say the BBC micro because it was so accessible. You could learn to program in BASIC and as you got better you could mix and match assembler in the same program. That was a fantastic way to learn.

Crusto: There have been rumours that a version of *Creature Shock* was nearly finished for the Jaguar CD. Is this true?
That probably is true, though I'm not sure how finished it was. We did some things on the Jaguar and the Jaguar CD and *Creature Shock* was one of our first CD games. It's entirely possible but my memory is a bit hazy…

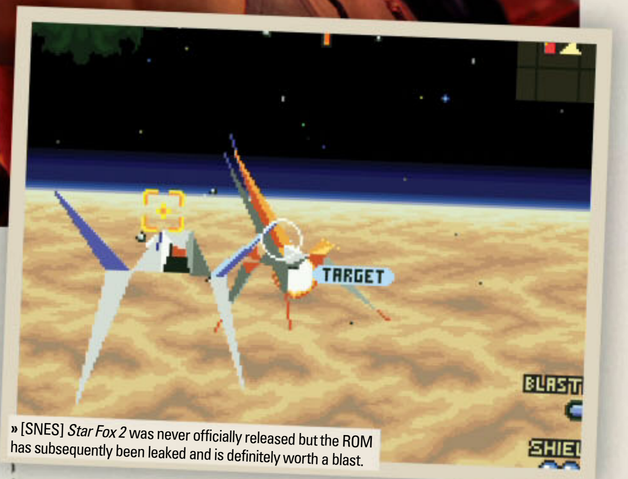
TimothyLumsden: Have you ever had a bad patch where you considered doing something else outside of games?
I am effectively doing something else though it's broadly in technology. My focus was always on the technical side of games and where technology and entertainment meet. I'm still involved with Ninja Theory and Origin8 but I've widened my remit!

Joefish: Why did you favour enhancing the SNES when its rival in the market, the Mega Drive, already had the processing power to do the sort of 3D you were famous for on the ST and Amiga?
Sorry but I'll have to disagree. The Mega Drive was slightly more powerful than the SNES but both were essentially 2D consoles and without an extra chip, their 3D capabilities were almost nothing. When we augmenting the SNES, Sega were working on the Mega-CD, which was their upgrade but that flopped. The Super FX chip was a 21mhz RISC microprocessor and when it came out, it was the most widely sold and successful RISC processor in the 3 years it was shipping. It wasn't until ARM got into every cellphone that they overtook it!

Slacey1070: What is the biggest regret of your career?
Building up a company, hiring a team and letting myself become less involved with the games, which many people tell me was a mistake. Maybe things would've turned out better at Argonaut. And doing Freemium games for things like Facebook. I've usually been into early moves onto new platforms but I completely ignored this and then it was too late.



» [Playstation 3] Jez continues to be involved with Ninja Theory, the talented bunch behind Dante's return in 2013's *DmC: Devil May Cry*.



» [SNES] *Star Fox 2* was never officially released but the ROM has subsequently been leaked and is definitely worth a blast.

It wasn't the only disappointment Argonaut had to endure. *Starfox 2*, a sequel to their highest profile collaboration, was complete and ready to release for the SNES, but it was shelved as Nintendo switched focus to the new console that they had in development, the N64. "They wanted something to launch on N64," sighs Jez. "In fact, when they did do *Starfox 64*, they ported [*Starfox 2*] line by line. Dylan Cuthbert says he saw them in the Nintendo office typing in the source code from *Starfox 2*! Our efforts lived on but we didn't get any credit… or money!"

Jez is quick to point out that the deal with Nintendo was very beneficial to Argonaut overall but adds that the Japanese giant had no qualms in head-hunting their top coder, Dylan, after terminating the agreement between the two parties in the mid-Nineties. Argonaut initially moved into PC development, with such CD-Rom titles as 1994's Creature Shock and FX Fighter the following year, and then onto the emerging 32-bit consoles. The changing nature of the industry post-PlayStation meant big money business deals took Jez further away from hands on game development, something he regrets. Growing the company consumed his time, as he travelled the globe securing deals with publishers for Argonaut-developed titles and keeping the income flowing in. Nevertheless, some interesting titles surfaced during this period – the aforementioned *Croc* and its successful sequel, the idiosyncratic *Buck Bumble* from a team led by the equally idiosyncratic Karl Graham and *Alien: Resurrection* released for the PlayStation in 2000.

> ## Trivia
> **Jez was the first person to be awarded an OBE explicitly for services to the videogame industry and has since been joined by Peter Molyneux, Ian Livingstone and the Darling brothers amongst others.**

The new millennium saw Argonaut Games, which had been floated on the stock exchange in 1999, apparently going from strength-to-strength, developing games for popular licences such as *Harry Potter*, Disney's *Aladdin* and *Bionicle* in conjunction with big name publishers. Yet just two years after being awarded his OBE in 2002, Jez discovered that the company he had founded and nurtured for over two decades was in dire financial trouble.

"2004 was the disaster year," he says, wearily. "Games were getting bigger and more expensive, the company had grown massively to 300 people and had gone public. EA came to us with *Catwoman*, which was the big movie of that year, and they wanted us to put half of the company, 150 people, on to this game and make it the next big thing. And they gave us only six months to do it! It was the biggest game we had done in the shortest time. We did a fantastic job given those two things but unfortunately, the movie flopped and the game flopped, too. I still say the game was better than the film but EA held us personally responsible and stopped giving us work."

Unable to downsize quickly enough, Argonaut PLC collapsed, with Jez resigning in the autumn as the company crashed around him. However, using money from ARC, the technology wing of Argonaut, Jez managed to save two small portions of the company, in the shape of Cambridge-based studio Just Add Monsters and Morpheme, a small mobile game developer. The latter went under shortly afterwards but Just Add Monsters evolved into Ninja Theory, responsible for early PS3 title *Heavenly Sword*. Jez remains a partner in the company, which continues to thrive and was behind the recent *Devil May Cry* reboot.

Jez seems accustomed to brushing himself down and getting on with things even after major setbacks. On the very day Argonaut went bust, he was busy setting up *PKR*, an online poker site that brought ideas in from the videogame industry in terms of presentation and graphics. The venture proved hugely lucrative. "I can't complain," he says, nonchalantly. "The first ten employees were all Argonaut people, you know."

The ever-entrepreneurial Jez currently calls himself an 'angel investor', finding interesting technology start-ups to support with funding and business advice. He's still involved with Ninja Theory and is a backer of Bit Coin, a clever way of doing financial transactions securely person-to-person online. "I think it'll change the world," he enthuses. Given his track-record, who are we to bet against him? *

Thanks to Martyn Carroll for images and Anthony and Nicola Caulfield for the introduction.

Jez San's

Desert Island Disks

The games that Jez San just couldn't live without and why he loves them

01 Super Mario World (SNES)
It took up a significant month of my life. I did nothing else but play this game. And what's really special is that I may be the first person in the world to have finished it. I think I was the first person to have a copy of it – Miyamoto gave it to me personally with a prototype SNES to take home. When I got to 96 stars, I was sure there must be 4 more. Why would you stop at 96? I scoured the world trying to find the 4 stars that didn't exist!

02 Super Ghouls 'n Ghosts (SNES)
I was playing this at around the same time as *Super Mario World*. I remember it being very hard and very unforgiving. You really didn't want to make a mistake as it would send you back really far!

03 Parappa the Rapper (PLAYSTATION)
I like unconventional games like this. I like classic rap – I reckon I could do The Sugarhill Gang by heart. I think I knew all the words to the Chop Chop Onion level though I've completed blanked it since.

04 Singstar (PLAYSTATION)
Again because it was different. I am quite good at it. Even though I was the worst singer in my family, I would win because you can kind of cheat it and make it think you are in tune and in time! I'd beat far better singers because I knew how the game logic worked and could trick it.

05 Buzz! (PLAYSTATION)
I know true gamers might look down on it but stuff like the *Buzz!* games, but I like them for what they are They're really well done.

06 Party Poker (ONLINE)
I played this and games like *PokerStars* and I thought, this is fun but it could be so much better. I was playing this online in the day time and then playing poker with my friends in the evening and thinking it's so much better when it's social… I should make online poker more social! It's what inspired me to do *PKR*, so there's a little plug for that!

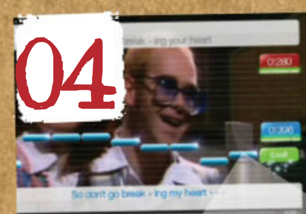
07 Star Wars (ARCADE)
The inspiration for *Starglider*. I did actually have an [actual] coin-op machine which ended up at Argonaut. It probably ended up on the scrap heap when Argonaut went bust.

08 Sinistar (ARCADE)
I used to love this. 'Run, coward!'… I love all that. I'm friends with RJ Mical, one of the programmers. I'm on his Monday Morning Tickler puzzle email list.



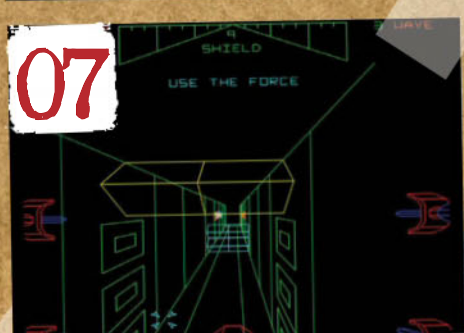




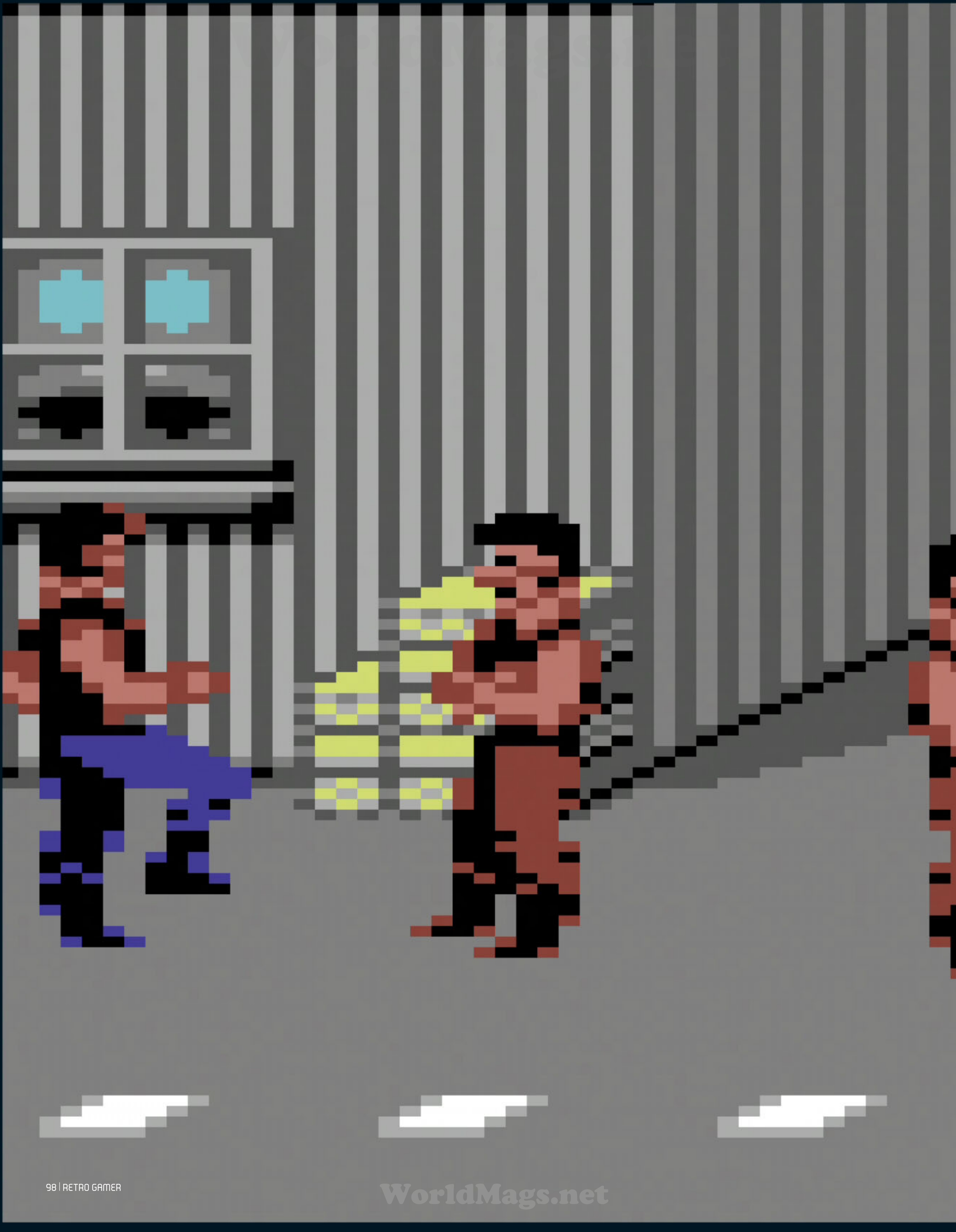














Shanghai Warriors

DON'T COME OUT TO PLAY...

» RETROREVIVAL

» COMMODORE 64

» IMPERIAL SOFTWARE DESIGNS

» 1989

We're fond of exercises in futility at Retro Gamer, and our favourite is playing bad games hoping they somehow become good. It's just so tempting! Take *Shanghai Warriors* here as an example. On the surface, this looks like it could be a solid C64 beat-'em-up – there's a decent number of enemies on screen, you can see weaponry on the ground, and the background visuals are attractive. We'd certainly find it relatively enticing if we hadn't played it, and seeing it in action might not hurt as characters animate smoothly and the game plays at a decent pace.

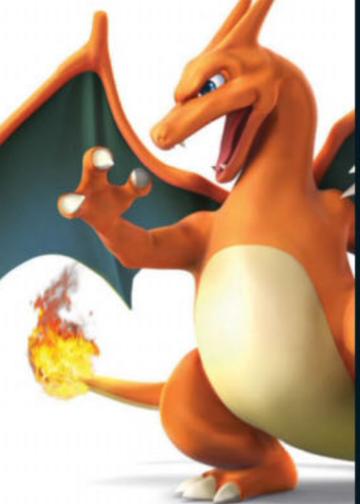
Unfortunately, we have played it – and that's where it all falls apart. For a start, the enemies have a couple of weird walking habits. Sometimes their animation simply never kicks in and they slide towards you, but other times they'll face the wrong way and moonwalk towards you. Quite often, when they reach you they have no clue of what to do and simply stand frozen in place, or punch in the wrong direction and still somehow hit you. You can deal with the majority of them by simply walking up to them, then holding the fire button and right on the joystick until they've been kicked to death. Walk forward a little bit, and repeat.

But still, we can't help but wonder what *Shanghai Warriors* would be like if the bugs were ironed out and the enemies were a bit more intelligent. It'd be a better beat-'em-up – but then there are plenty of those already. We should probably be playing them instead. *

RETRORATED



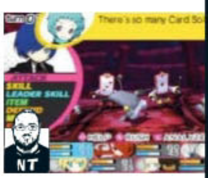
>> This month we enjoy eight-player brawls in Super Smash Bros and discover if Geometry Wars 3: Dimensions trumps TXK



✱ PICKS OF THE MONTH



DARRAN
Geometry Wars 3: Dimensions
An excellent addition to the series that is already causing high score fights



NICK
Persona Q: Shadow Of The Labyrinth
I've not had this much fun with a dungeon-crawler in absolutely ages!



[Wii U] The game offers a variety of themed fights, such as this match pitting Mario against his greatest foes.

Super Smash Bros

NINTENDO RACKS UP ANOTHER SMASH

INFORMATION

- » **FEATURED SYSTEM:** WII U
- » **ALSO AVAILABLE ON:** 3DS
- » **RELEASED:** OUT NOW
- » **PRICE:** £49.99
- » **PUBLISHER:** NINTENDO
- » **DEVELOPER:** SORA/BANDAI NAMCO GAMES
- » **PLAYERS:** 1-8



***Super Smash Bros For Wii U* is a game with a lot to live up to. The original N64 game joined the ranks of** multiplayer classics such as *Warlords*, *Bomberman* and *Super Mario Kart* when it was released in 1999, and its GameCube sequel is a perennial party fixture that also enjoys tournament popularity. The good news is that it meets the lofty expectations of players worldwide; the bad news is that the single-player experience isn't as cohesive as in previous games.

The improvements are obvious to see. The game boasts a number of new characters amongst its huge roster, including Little Mac of *Punch-Out!!* fame, the dog and duck from *Duck Hunt*, and non-Nintendo challengers Pac-Man and Mega Man. The new additions are generally excellent and old hands have been rebalanced, with Sonic now far more useful outside of his Final Smash attack and heavy characters being more viable. Returning Players will appreciate the inclusion of classic stages, but the new ones are also good – we particularly liked the *Mario Kart 8* stage, in which the twisting track formed a shifting wall. The irritating tripping mechanic of *Brawl* is thankfully gone too, which is sure to please the hardcore *Smash* players.

The big new multiplayer feature is support for up to eight players, and it's as messy and chaotic as you might expect. It's a huge amount of fun, but it can become quite difficult to tell what's going on as the bodies fly and pyrotechnics fill the screen, so it's best suited for players that can enjoy the game whether they're winning or losing – tournament players who still favour *Melee* over *Brawl* won't like it at all. The only disappointment is that a substantial proportion of the game's arenas don't support more than four players. There's also a Smash Tour section, which only serves to space out fights with an elaborate randomization process that isn't a whole lot of fun.

For single players, there's still a good amount of content to be had but it's hard to argue that the

» [Wii U] Amiibo fighters provide some distraction, but you're never able to take control of them.

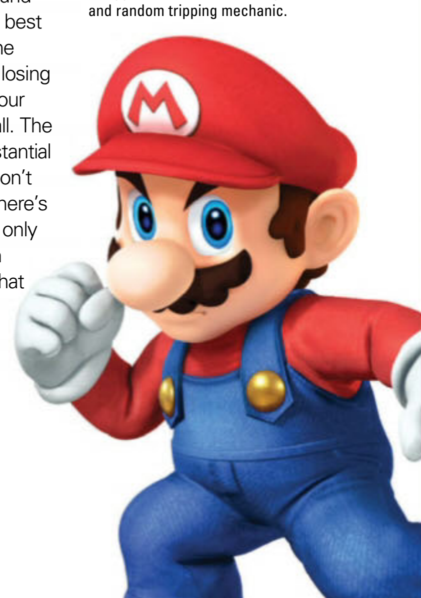




» [Wii U] Eight player battles are so chaotic that it can become difficult to tell what's going on.

BRIEF HISTORY

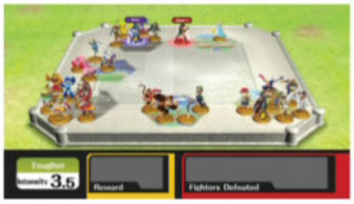
» Nintendo's unconventional crossover scrapper made its debut on the N64 in 1999, before receiving a hugely popular GameCube sequel in 2001. The Wii version, *Super Smash Bros Brawl*, was reviewed well and sold like hotcakes, but fans were disappointed with its slower pace and random tripping mechanic.





» [Wii U] *Super Smash Bros* continues the tradition of excellent graphics in first-party Wii U games.





» [Wii U] The single-player modes are enjoyable, but none make up for the lack of a substantial adventure.



» [Wii U] Final Smash attacks are often visually spectacular, but Pac-Man's is pleasingly low-tech.

same effort has been made. *Super Smash Bros For Wii U* doesn't contain any equivalent of the Adventure or Subspace Emissary modes found in the previous games, so there's no focal point for lone players and the whole experience feels a little disjointed. The content that remains is substantial, but buried three menus deep in a horribly designed interface. The best mode is All-Star, which pits players against collections of fighters grouped by era, starting with recent designs like the Wii Fit Trainer and Rosalina and going right back to Donkey Kong and Pac-Man. Damage carries between rounds, so you'll need to make sparing use of the healing items provided.

Other modes include Events, in which you fight themed battles with variant rule sets. These include Mega Man against the Yellow Devil and its chromatic cousins, Pikachu and Pac-Man, as well as an event in which Pac-Man must eat six consecutive enemies to gain the 7,650 point bonus. These are fun, quick diversions and filling out the map is enjoyable. The Special Orders mode includes Master and Crazy Hand challenges, and mini-games including the Home-Run Contest, Target Smash and Multi-Man Brawl.

What is impressive is Nintendo's dedication to allowing players to play as they feel comfortable. The Wii U's GamePad and Pro controller are both supported, with off-screen play on the former proving to be a comfortable alternative to using the TV. It also supports the Wii Remote and Classic Controller, and there's an adapter available for GameCube controllers too. If you own *Super Smash Bros For 3DS*, you can use your 3DS as a controller. All of this means that your irritating friend who could beat you if only they had a better controler will have absolutely no excuses to fall back on this time.

As ever, the game is filled to the brim with nostalgic touches for Nintendo fans, including the ever-popular trophies. For the first time, these have been made available in physical form, as Amiibo figurines. These have been heavily promoted and while they are interesting, they're far from essential. Each figurine provides a fighter for the CPU to control, which can be customised with unique special moves and abilities, and trained into a rock-hard fighting machine. This is a little fun, but the inability to use the Amiibo fighters yourself is disappointing. Still, they can become very good, even exceeding the skill levels of some human players.

If you're going it alone, the unstructured single-player experience means that you'll likely tire of the game more quickly than previous entries in the series. However, the uncomplicated fighting and popular characters make great party fodder, as they always have, and long-term Nintendo fans are sure to get a lot from the game. With more Nintendo fan service than ever before and the best combat the series has seen makes it an easy game to recommend – just make sure to get some friends involved. *

In a nutshell

The single-player offering feels less developed but the new characters and eight-way fights means that there simply hasn't been a better version of *Super Smash Bros* for multiplayer enthusiasts.

>> Score 84%

RETROROUND-UP

>> Every month we look at all the classics and latest releases that are available to buy or download

PICK OF THE MONTH

Geometry Wars 3: Dimensions

» **System:** PS4 (tested), Xbox One, PS3, PC, Xbox 360
» **Cost:** £11.99 » **Buy it from:** Xbox Live, PSN, Steampowered.com

It's somewhat fitting that the return of Sierra Entertainment also heralds the return of one of gaming's best modern shoot-'em-ups. And *Dimensions* is a great return to form, even if it does slightly falter in places.

Unlike previous games in the series, *Dimensions* is the first game where the action takes place over three-dimensional shapes. The traditional 2D maps are still there, but the new geometric designs are where the action takes place and they work exceptionally well once you get used to the new dimension.

Also new to the series is a lengthy campaign mode that should take many hours to fully complete. Each of the 50 levels is based around a specific mode from the game, from Deadline (score a certain amount of points in a strict time limit) to Pacifism (progress as far as you can through gates without firing). It also introduces several new modes that all work exceptionally well. Claustrophobia is arguably our favourite. Walls continually close in on you and you have to score as many points as possible before you inevitably hit an enemy. Then there's Sniper, which replaces your spray of unlimited bullets with limited ammo, meaning precision is essential if you want to achieve a high score. Rainbow is another interesting addition that has you trying to shoot continually spawning drones that are trying to paint the playing area. Bosses are also included, while it's now possible to actually power-up your craft with additional add-ons, from mines to homing missiles. This last point is important as one of the few areas where *Dimensions* occasionally falls down is with the tricky difficulty spikes that pop up.

We'd be happy enough with just the above but developers Lucid Games have spoiled us; there's plenty more to discover in *Dimensions*. Classic modes of Deadline, Evolved, King, Pacifism and Waves all exist, there's local multiplayer, online play and an additional extras section with all sorts of extra game modes making *Dimensions* the game that just keeps on giving. It's not quite as refined as Jeff Minter's excellent *TxK*, but that said, the two are very close.

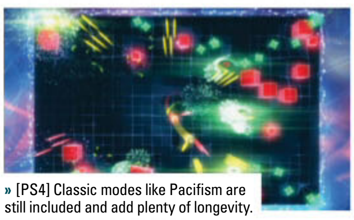
94%



» [PS4] It takes a little while getting used to the new dimension, but it soon becomes second nature.



» [PS4] Both the Xbox and PlayStation versions have exclusive content.



» [PS4] Classic modes like Pacifism are still included and add plenty of longevity.



» [PC] The bosses are challenging and can't be hit when their shields are up.



Tomb Raider 2

» **System:** iOS
» **Buy it for:** £1.49
» **Buy it from:** AppStore

There's a great line in *Jurassic Park* where Jeff Goldblum says "your scientists were so preoccupied with whether or not they could that they didn't stop to think if they should." It perfectly sums up this latest conversion from Square Enix. There's no denying that Lara's second adventure looks great on the iPad's razor-sharp screen. Unfortunately, the game itself is a chore to play, due to the controls being horrid. There are far too many buttons to use and progress becomes slow and tiresome because you spend far too much time battling the twitchy controls. Things become ever so slightly more manageable if you put Lara in walk mode, but this presents its own problems, while making jumps or swimming become an exercise in frustration. Yes it's certainly cheap, but that's all it has going for it. Avoid.

25%



Persona Q: Shadow Of The Labyrinth

» **System:** Nintendo 3DS
» **Buy it for:** £34.99
» **Buy it from:** eShop, Retail

While all the characters in *Persona Q* are pulled from the popular PS2 *Persona* releases, there's a delightfully retro mentality to this dungeon-crawling spinoff. Not only do you explore dungeons in first-person, a throwback to the very first game in the series, but you have to manually draw your map on the touchscreen – a feature borrowed from *Etrian Odyssey*, another Atlus series.

What's surprising is that the game is relatively tough as battles actually require some level of preparation and strategy, and the game becomes engrossing quite quickly as a result. But while the game does an excellent job of introducing existing characters and plot to players new to the series, the upbeat high school setting won't be to everyone's taste.

86%



Lara Croft And The Temple Of Osiris

» **System:** Xbox One (tested), PS4, PC
» **Buy it for:** £14.99
» **Buy it from:** Xbox Live, PSN, Steampowered.com

Temple Of Osiris is geared towards multiplayer play. We know this, because when we played it on our own we had to be woken up because it sent us into an involuntary coma. We should be using words like exciting, entertaining and dynamic to describe Lara's second isometric adventure, but instead we've found ourselves using boring, dull and pants instead. The careful blend of tight, cleverly orchestrated fights and smart puzzle solving is notably absent from this sequel, leaving a bland adventure that just feels like a chore to play. The help you received in the first game is now completely absent, meaning everything just tak… zzzz…zzzzz…

50%

Welcome to Homebrew



>> Jason Kendall – one of the contributors to the ABBUC competition with his shoot-'em-up Ramp Rage – asked me to mention his Atari high score club over at Atari Age. They play both classic and homebrew titles a that sounded like a good idea, so Kikstart.eu/hsc-a8 will send you to the forums where he posts as the realbountybob



» [MSX] Kitten Kong?

FROM JAPAN WITH LOVE

The MSX finally gets the spotlight

Our attention was recently drawn to baa, a solo Japanese developer working on the MSX whose recent game *The Holy Emperor* is reviewed elsewhere in this issue. But there are eight other titles covering a range of genres that MSX owners might want to have a look at, all of which have been released over the last couple of years and are available to download from his website. In fact it's been a fantastic time for the system in general, and hopefully this influx of interesting new games will convince more gamers to invest in this great little system.

Demoneyicon is a bit like Whack A Mole with a giant beckoning cat that destroys things around Tokyo with well-timed swipes of its paw. Then we have *Vulgardry*, which bears the subtitle "*Proving Grounds Of The Lewd Over Queen*" and, although we have no idea how lewd said queen actually is, the game itself is a dungeon crawler similar to the first game in the *Wizardry* series which can still be played with a little guesswork as regards what the Japanese text says during encounters. And then there is *Skyscraper Tenoble* where the objective is to take traditional dancing girl Ohteatanecko to the top of a huge building with a window cleaner's cradle so that she can dance for six hours which, for some unexplained reason, saves Japan from evil bankers and their "USA" virus.

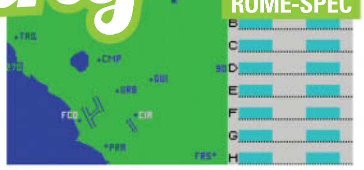
Most of the games are well executed, but some are a bit harder to play than others due to the language barrier. That said, we enjoyed playing what a Japanese developer has come up with and are now interested to see more of what Japan has to offer on the homebrew gaming front. Kikstart.eu/baa-translated will take baa's website and push it through Google Translate, so the results will be somewhat mangled but it shouldn't be too difficult to pick up the gist of each game from the text and locate the downloads. Head over there now and discover an interesting range of quirky little games.

> "There are eight titles covering a range of genres for MSX owners"

Incoming

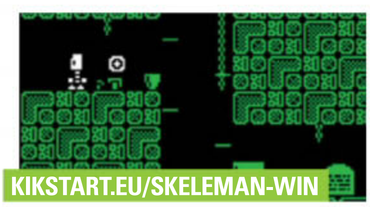
A selection of interesting efforts, including an Air Traffic Simulator for the Speccy

KIKSTART.EU/ATC-ROME-SPEC



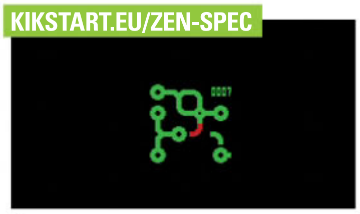
▲ Take control of the skies, guiding planes safely to their destinations with *Air Traffic Control Rome.*

▼ Who knew that skeletons could be cute? *Super Skeleman* for Windows has some retro-themed platforming action.



KIKSTART.EU/SKELEMAN-WIN

KIKSTART.EU/ZEN-SPEC



▲ Rotate the pieces to make sure there are no loose ends left on screen with *ZEN* on the Spectrum.

NEW GAMES NEEDED

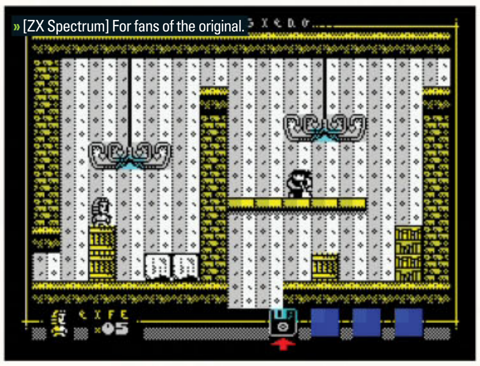
If you have a homebrew project you would like to see featured then please contact us at:
retrogamer@imagine-publishing.co.uk

MONKEYING AROUND

Sporting programming by Andreas "Mr SID" Varga and graphics from Steve Day, *Donkey Kong Junior* is a conversion of the early Nintendo game for the C64 which is based on the Atari 7800 version released in 1988. For those who haven't played the original, Mario is holding Donkey Kong prisoner as revenge for their previous encounter and it falls to the ape's son to save him from the now-antagonistic plumber's cage. So far the response from C64 owners has been very positive and we'll take a proper look next issue. In the meantime, the download is at the CSDb via Kikstart.eu/dk-junior-c64



» [C64] It's up to Diddy to save his dad!



» [ZX Spectrum] For fans of the original.

THE BUTLER DID IT

Fans of Robert Jaeger's flick screen exploration game *Montezuma's Revenge* might want to consider giving the recently-released Windows remake from Mariusz Jakubowski and Michal Smoron a try. This new version was written when both were learning about game development at GameDevSchool.pl in Warsaw. Part of the school's course is about remaking classic games to understand what goes on under the hood. Kikstart.eu/montezuma-win goes to Mariusz Jakubowski's website for the game, which also explains in more detail about how it came to be written.

▼ How about a bit of a sing song? *International Karaoke+* for the C64 shows off a couple of good tunes.



KIKSTART.EU/IKPLUS-C64

Homebrew heroes



Marek "MaPa" Pavlík and Zdeněk "Pseudografix" Eisenhammer are contributors to the ABBUC software contest as co-developers of platform-based puzzler RGB. We spoke to them about how they started working together

How did you start working together on games?
Marek Pavlík: I knew Zdenek from the BBS systems that I was using at my university studies. We talked a lot about Atari, new games and demos etc. In 2007 he convinced me to try coding on Atari. It started with simple tasks he gave to me and then we did our first 1K intro Crossover in 2008. After that we then decided to try a platform game which unfortunately was never finished. We did some more intros and at the start of 2010 decided to do a game for the ABBUC Software Contest. We tried something simpler than the platform game which became our first released game *Ocean Detox*.

Zdenek Eisenhammer: After making several games with Fandal, I realized that there were not many skilled coders so in 2007 I asked MaPa whether he would like to get back to Atari coding. He agreed and our first co-operation was a 1KB intro, which won the Glucholazy intro compo in 2008. It took another two years until we finished our first game, which surprisingly won the ABBUC Software Contest in 2010.

What can you tell us about *RGB's* origins?
MP: I think I got the basic red-green-blue idea in autumn 2012 and wanted to make something around it, but I had just the theme and no specific game mechanics so we didn't try it for ABBUC 2013. Over the time, the idea grew and I had a bigger game in my mind with a simple story behind it. Sometime in April or May this year we started thinking about our next game and couldn't come up with anything we both liked, so we decided to try my *RGB* idea in a simpler form.

ZE: Initially we did games that had been in my mind with some mock-ups already residing on my disk (like *Ocean Detox* and *Marbled*), but that source is now exhausted so we need new ideas. In the last two years MaPa was able to come up with ideas for *Rolltris* and *RGB*. I guess it's my turn again for the next two seasons.

What kind of feedback have you received?
MP: The feedback is great. I'm really glad that people like not just the visuals, but my original concept of the game too.

Were there any particular high or low points during development?
MP: Nothing extraordinary, but Zdenek surprised me that he was active this time and we didn't have long breaks in communication as usual! The biggest problem when creating *RGB* was to figure out the exact game mechanics and rules as there was only a rough concept at the beginning.

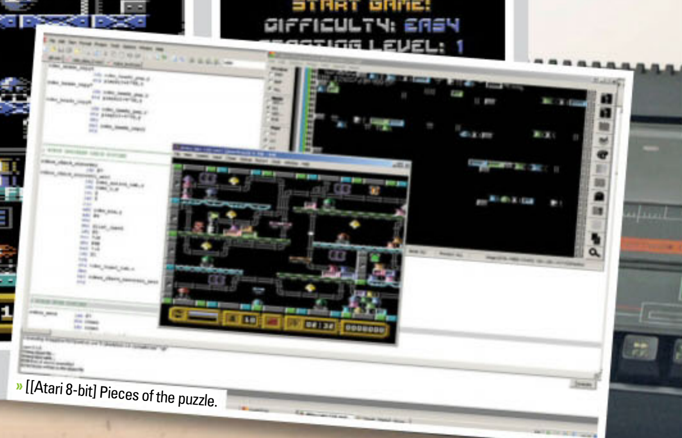
ZE: There was just one "issue" about two weeks before the deadline, when I was trying to design a nice title screen; after several dissatisfactory attempts I suggested contacting Powrooz who is one of the best artists on the Atari 8-bit, since we had already successfully cooperated with him on *Ocean Detox* and he gladly sent us several beautiful images.

Finally, do you have any future plans to make more games?
ZE: Yes, we are already discussing our next project and the concept is slowly taking shape. I won't reveal any details now but hopefully the bar that was set with *RGB* will be raised once more.



» [Atari 8-bit] RGB was praised for its visuals and original concept.





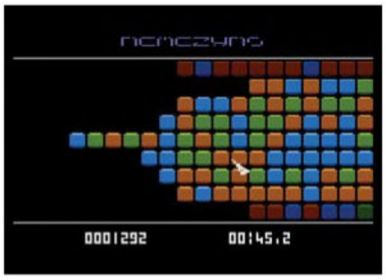
» [[Atari 8-bit] Pieces of the puzzle.

Even more Homebrew REVIEWS

ABBUC SOFTWARE COMPETITION 2014



» [Atari 8-bit] *Dimo's Quest* draws insparation from *Chip's Challenge*.



» [Atari 8-bit] Wipe out the blocks before they pile up.



» [Atari 8-bit] *Ransack* features a spaceship with what looks like a pogo stick attached to it.

» **FORMAT:** ATARI 8-BIT » **DEVELOPER:** VARIOUS
» **DOWNLOAD:** KIKSTART.EU/ABBUC-2014 » **PRICE:** FREE

The 2014 instalment of the now traditional ABBUC software competition saw six new games released for the Atari 8-bit and, although one of the games wasn't publicly available at the time of writing and can't be included, we've put the other five through their paces.

First there is some action puzzling from MatoSimi's *Nemezyro*; clicking a group of coloured tiles will makes them disappear, leaving the others to fall into their place with the twist being that the tiles appear from the right of the screen and scroll left, ending the game if they reach the edge of the playfield. Similarly puzzle oriented is *Dimo's Quest In* Abbuc *Land* - based on a previous Amiga game from developer Thomas Schulz as well as being a homage to *Chip's Challenge* - which sees the titular character collecting sweets, solving puzzles and avoiding nasty creatures.

RGB offers some brightly coloured platform-based puzzle action starring a robot who needs to eliminate all of the enemies in each level by shooting them with appropriately coloured laser beams. Changing the beam colour is either done through on-screen items or by using some of the robot's power to drive a 'Recalibrator' if there's one available and care must be taken to avoid enemy fire.

Last year's winners handed in a horizontally scrolling shoot 'em up called *Ransack*, converted from the BBC Micro that gives the player control of a craft that bounces along the rapid, horizontally scrolling landscape as it zaps enemies. And on the subject of shooting games, we have Jason Kendall's *Ramp Rage*, a vertically scrolling example of the genre which looks and feels like a early Eighties Atari 8-bit game. This is the author's first assembly language program and he's said that there will be an improved and updated "post ABBUC" version soon based on feedback from players.

While there might not have been a huge number of releases this year, the quality was high and all the games we've tried should be in every Atari 8-bit owner's collection. *Dimo's Quest* was voted the winner by members of ABBUC.

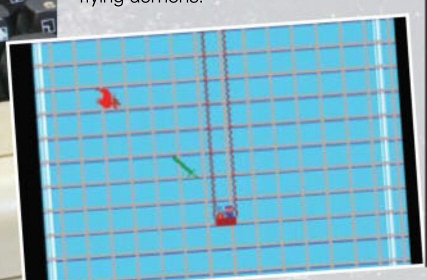
90%

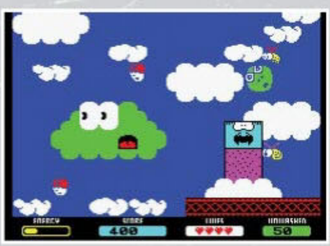
Make this

Every month our very own Jason Kelk will be teaching you handy new programming techniques. This month: enemy movement

NEW

1 A simple method for moving enemies is assigning a direction and speed to each object and simply resetting their position when they're destroyed. *Skyscraper Tenoble* for the MSX does this with their flying demons.





2 What games like *Willy The Wasp 2* on the Spectrum do is more complicated, there is code for each object that handles behaviour. This can range from patrolling between a number of points, moving randomly, or attacking when they get close.

3 And this works for games like *Commando Arcade* on the C64 as well, so objects are spawned at set points on the map and either react to the player and their environment or have fixed behaviour like the prisoner and his guards.





4 In the case of something like *X-Force* on the C64 there are waves of nasties which have one lead object and others following it with a delay; again, movement can be anything from "virtual" joystick commands to code that responds to the player actions.

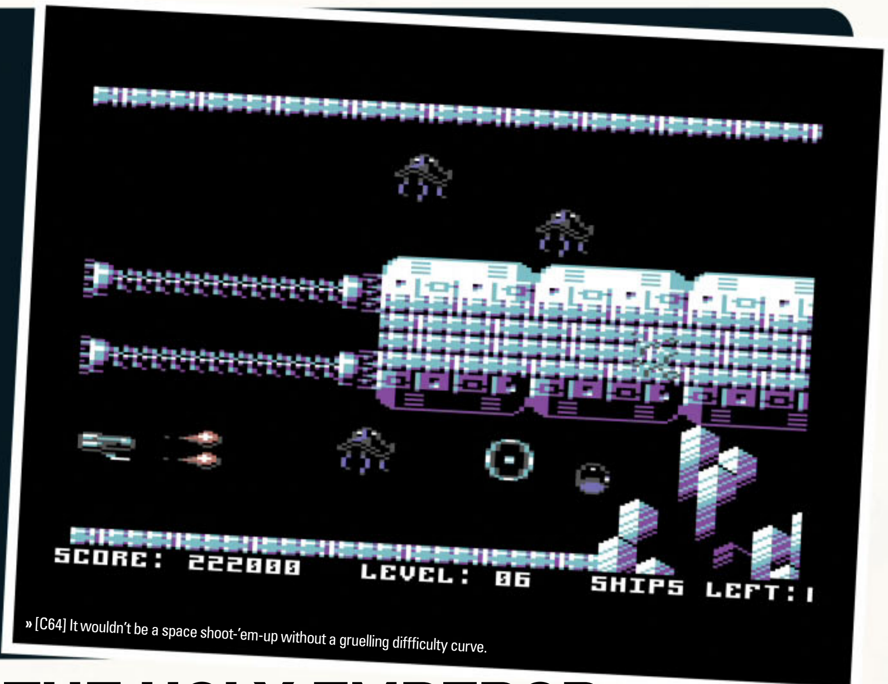
X-FORCE

» **FORMAT:** COMMODORE PLUS/4 » **DEVELOPER:** THE NEW DIMENSION
» **DOWNLOAD:** KIKSTART.EU/X-FORCE-C64 » **PRICE:** FREE

After a hard day down t'space pit the last thing anybody wants is for them and their spaceship to be abducted by aliens during the flight home. Unfortunately, that's exactly what happens to our poor hero and, after waking to find himself in an easy to escape cell that isn't far from where his *X-Force* craft is parked, the obvious plan of action is to blast a route to freedom, collecting some power-ups along the way.

This involves wading through wave after wave of high-speed attackers and bosses by either dodging or preferably destroying them but since *X-Force* is quite twitchy to control and the enemies barrel around the screen like they left the gas on, even the earliest stages can be frustratingly hard. It isn't a bad game as such, but the C64 is well served for this genre and *X-Force* struggles to stand out in that crowd. If you're a big fan of the genre you'll certainly get some enjoyment out of it, but anyone else is likely to struggle with the often unforgiving gameplay.

51%



» [C64] It wouldn't be a space shoot-'em-up without a gruelling diffficulty curve.

WILLY THE WASP 2

» **FORMAT:** ZX SPECTRUM » **DEVELOPER:** DEATH SQUAD
» **DOWNLOAD:** KIKSTART.EU/WILLY-2-SPEC » **PRICE:** FREE

***Willy The Wasp*'s home is near a nuclear power plant, something that wouldn't usually be a problem if it weren't for the environmental protestors who have taken over and caused the reactor to go into meltdown.** Willy isn't too happy about the idea of a potential radioactive meltdown causing him to glow the dark so he takes it upon himself to deal with the "Unwashed Rabble" by stinging every single one of them until they give up.

There are energy-sapping nasties to avoid – including an amorous bee called Barry who appears from the beehives on every screen – and getting above the protestors to sting them is challenging since some can't be reached until either Billy's hive has gone or one of their compatriots has been stung and shrunk down to clear a path through the maze-like screens. *Willy The Wasp 2* is a colourful action puzzle with a large maze-like map to work through and lots of challenging gameplay.

85%



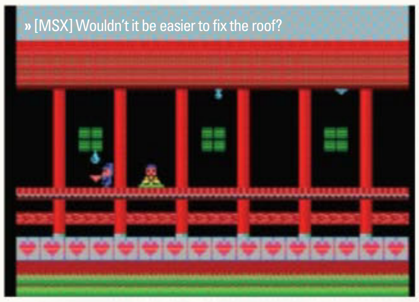
» [ZX Spectrum] Even the landscape is aghast.

THE HOLY EMPEROR

» **FORMAT:** MSX » **DEVELOPER:** BAA » **DOWNLOAD:** KIKSTART.EU/EMPEROR-MSX » **PRICE:** FREE

The Japanese King Ohsazaki has, in his infinite wisdom, declared that no taxes will be collected from his people for three years to alleviate their poverty. This does mean that when the palace's roof develops holes there isn't any cash to repair it, so instead the king must run around the great hall, catching water as it falls and moving the queen away from the damp patches. If he lasts for a full nine hundred and ninety nine days the people will be impressed and declare him The Holy Emperor.

This is a simple game similar to Activision's *Kaboom!* but with only one object at a time. That doesn't mean it's easy, however and getting to the next drip often means a manic dash across the room which can be satisfying when the king just makes it. Becoming an emperor is going to take quite a bit of skilful playing. A fun little game that will really give your reactions a jolly good workout.



» [MSX] Wouldn't it be easier to fix the roof?

83%

MAD CRASH RACING

» **FORMAT:** COMMODORE AMIGA » **DEV:** ARTEX GAMES
» **DOWNLOAD:** KIKSTART.EU/MAD-CRASH-AMIGA » **PRICE:** FREE

Take a circular race track with no exits or hazards, dish up a couple of high performance sports cars and send them tearing off in opposite directions. The computer will try to cause pile-ups while the player has to avoid them, but the speed and direction of both vehicles are constant so the only thing that can be influenced is which of the two lanes they're in.

Mad Crash Racing is like a pared down version of the coin-op, *Head On* and doesn't offer much in the way of playability because two cars driving in circles gets stale quickly. And yet it does offer some thrills and spills in short bursts and should prove to be fun with a few people competing to see who can complete the most laps.

53%



» [Amiga] Although it doesn't last long, it's worth a try.



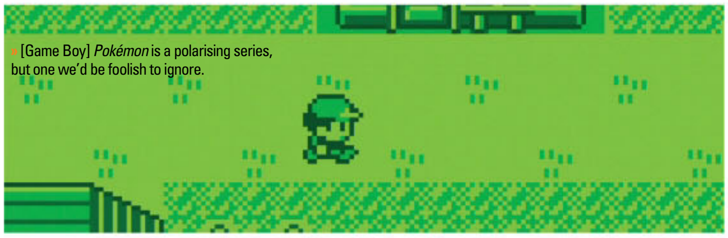
» [Amiga] If you like roundabouts, this is for you.

MAILBAG

HAVE YOUR SAY… SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN! Every month, one lucky writer-in will receive a copy of our latest eMag, **Retro Gamer Load 3**, a bargain if ever there was one





» [Game Boy] *Pokémon* is a polarising series, but one we'd be foolish to ignore.

SCREW YOU, PIKACHU

Hi **RG**,
I just wanted to say that I thought the *Pokémon* feature in issue 135 was the biggest waste of paper I'd ever seen. Why would I want to read 10 pages about some cash cow series for kids, let alone see it staring at me on the cover? Please, *please* don't ever feature those games again.
Will Hines

We're sorry to hear that you weren't a fan of *Pokémon's* inclusion in the magazine, Will – you're not the only person who felt that way, but a lot of readers were happy to see it. It's certainly something that fits the magazine, when you consider that it's a series that grew from an 8-bit monochrome RPG, and the massive success of the series makes it impossible to ignore. That said, after such a big feature we won't need to do any in-depth Pokémon coverage any time soon, so don't worry too much.

STAR LETTER

SLAP FIGHTING DIRTY

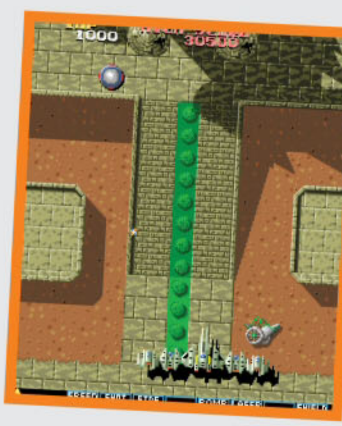
Dear **RG,**
I have a confession to make, I've been living a lie for 25 years or more and it's time to come clean.

In the late Eighties my friends and I would frequent our local games arcade and would compete against each other on games that we knew we could get high scores on. We would each play our chosen game and then swap over onto whatever the other friend, or friends had been playing. My usual games of choice were *Slap Fight* or *Black Tiger* and although I was good at *Black Tiger*, my scores on *Slap Fight* were always at least three digits longer than anyone else's. I'm sorry to say that this was never down to skill, I cheated and this is how I did it.

On level one, don't shoot any enemies and make it past the pond around halfway through the level, die and your next ship is granted with every power-up bolted on. Make it all the way through the first level without touching the fire button and your teleported deep into the game with all power-up's and a humongous high score! It takes some skill to achieve so I don't feel bad but still, a lie's a lie and I felt I should get it off my chest.

Great magazine, hope you liked my tale of woe and cheers for listening.
Craig Elliott

» [Arcade] For the warp-free cheat – die without firing and you will get powered up.



We're not going to condemn you for that, as we wholeheartedly believe that if you're not cheating, you're not trying. Besides, we think this one is a borderline case – you employed a very risky strategy in order to gain massive rewards, and guess what? It paid off!

Who's to say that your friends could have pulled off the required feat of pacifism that you showed off so valiantly? You got away with it, Craig – an eMag is your reward.

TRASH TALK

Dear **RG**,
Please, listen. I remember my days at school where there was a guy, John Seychelle, who had a VIC-20 but was known as "VIC-20 Man" and liked to revel in the affectionate ribbing he would receive; he wore it as a badge of honour no less. When people found out though, that I had a TRS-80 Model III, I was immediately branded "Todd the TRASHMAN!", and was incessantly riled into submission. I am still haunted to this day because of it, and constantly hear their derision and laughter in my head daily. Recently this has compounded as I have somehow managed to find employment in the industrial garbage removal sector and so my past comes back to haunt me each and every day, with every single bag I loft into the compressor chute.
So I realise I need help: I wonder if you guys know of any computer exorcists perhaps, or shamans who deal with removing TRS-80 related curses from childhood. Failing that, any half-decent karate or jiu-jitsu schools around the area.
Yours in good faith,
Todd "The Trashman" Clarke

» [Arcade] Konami's *Fast Lane* is one of many games we've marked for coverage in The Unconverted.



At the risk of turning into some form of retro gaming agony aunt, we'd suggest that it will be impossible to resolve your inner turmoil through violence. However, martial arts training provides excellent exercise and teaches self-discipline, which may well help you to become a healthier, happier person. It's certainly a better route to pursue than trying to find a computer exorcist – Darran tried that when we presented him with an Atari 2600 that had an irremovable *Dig Dug* cartridge, and found that no such thing exists.



» [C64] It could have been worse, Todd – imagine if Trashman had been given a TRS-80 release…

Don't forget to follow us online for all the latest retro updates

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DISCUSSED THIS MONTH

Drew Sleep

Retro Gamer's new production editor is the talk of the office this month. He's quite a fan of RPGs – currently re-playing the entire *Final Fantasy* series alongside working through *Pokemon Omega Ruby* during lunch breaks. All that time spent managing his parties should be good for keeping us in line!

COIN-OP CONCERNS

Hi **Retro Gamer,**

Thanks for the magazine – I'm a big fan of what you guys do each month. But unfortunately, I've come across a problem lately that I'm a little bit worried about. My favourite bit of the magazine is The Unconverted, as I didn't live anywhere near an arcade growing up and love to find out about games I've never had the chance to play. Lately it doesn't seem to be getting as much love as it should be, though. Over the last few months it has barely appeared, and even before that it kept getting cut to a single page.

Will the section make a comeback soon? I really hope you haven't run out of games to cover.

Karl Vogts

Don't worry Will – we haven't dropped The Unconverted and plenty of games are still waiting to be covered. We've just had an awful lot of content to squeeze into the magazine, which has occasionally left The Unconverted as the odd section out, so to speak. Look for it to return shortly.

N-GAGED

Hi **RG**,

I don't know if it might be a bit soon for this, but have you considered covering some of the bizarre, failed handhelds that all seemed to crop up at once about a decade ago? I'm talking about machines like the Nokia N-Gage and the Gizmondo. They were pretty weird, but in some respects they were ahead of their time, thanks to the way they championed things like mobile gaming and ad-supported gaming that are big today. Plus the Gizmondo seems to have a really interesting history. What do you say?

Richard Dempsey

They're certainly interesting machines, and represent stories that are definitely worth telling. The Gizmondo in particular is an odd one, due to the rather controversial history that you alluded to and its eventual popularity as a satellite navigation system for drivers. Having said that, they're a little on the new side and there are machines that are both older and more popular that we've yet to cover, such as the Gamecube. There's no doubt that Retro Gamer will cover them in the future, but that coverage might be some way off right now.



» The N-Gage certainly had problems, but it set the trend for today's massive mobile gaming scene.



From the forum

» www.retrogamer.net/forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

Your favourite PlayStation game



Fawltykog
Alien Trilogy, my first introduction to the wonderful and frightening world of first-person shooters.

Sputryk
Crash Bandicoot and sequels. Great, great fun and a welcome change from *Mario*. As is *Crash Team Racing*.

Megamixer
Final Fantasy VIII. It was more than just a game; it felt like an experience with characters I truly cared about. The soundtrack is one of the best of all-time in my opinion and I have the CD boxset to go with the game.

samhain81
Tony Hawks Pro Skater – A milestone in the extreme sports genre. I think I clocked in over 500 hours on the demo alone

HalcyonDaze00
Not an easy choice, but I will give another vote to *Tenchu*, it did stealth better than *Metal Gear Solid* and pretty much everything that followed.

Whatzername
Final Fantasy VII – The story, the music, the design, the atmosphere, the death of Aeris… It's just brilliant in every sense of the word.

TwoHeadedBoy
Vib Ribbon, no question! A truly "never-ending" game, with lots of ridiculous grinning going on as well.

the_hawk
I'll say *Bishi Bashi Special*, simply because of the mad fun that I had playing it. It always reminds me of a very happy time in my life.

Charco
I would have to go for *Resident Evil 2*. Everything was bigger and better than the original and the atmosphere was superb. It's crying out for a HD remake, make it happen Capcom!

necronom
This is actually an easy one for me - *Metal Gear Solid*. It was such a massive leap up from what I was used to playing (Amiga games). I've played through it 11 or 12 times.

Gibberish Driftwood
Jumping Flash is quite unique. A platform game in first person perspective. There isn't many of those around.

BensJammin
Burning Road… The closest we got to Daytona and massively underrated. Good graphics and soundtrack, but it was so hard at the time.

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IMAGINE PUBLISHING



» A selection of vintage Game & Watch LCD games, including our favourite ç Mario Bros.



» Gaming-related merchandise can also be found at Video Game Market, including these pixel bead sprites.



Video Game Market 2

Following last year's successful debut, RetroCollect is holding another retro gaming sales event at Leeds Town Hall on February 7th. Adam Buchanan sits down to chat about this year's event…

Were you surprised by the success of last year's event?
Although we were more than aware of the demand for such an event, we never fully anticipated how many people would turn up for the bargains we promised. Then again, with how difficult car boot sales have become for retro gamers and the ever growing demand for cartridges, it was almost inevitable that we'd have our hands full on the day.



» Is Adam playing a game, or using VR to design the floor plan? The former, obviously.

Although hitting the venue's capacity, it was without a doubt a fantastic day for all that attended, with many gamers leaving the event with bulging bags full of gaming goodies.

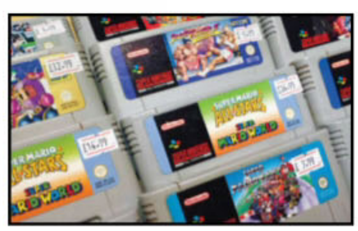
What improvements are you adding to this year's show?
Space! And lots of it! Now spanning two generous floors, we've widened the walkways to allow for leisurely browsing and bargain hunting - something which is most definitely needed given that Video Game Market 2 is now set to host over 100 trader tables.

Is there any reason why the market is only on one day?
Unlike Play Expo and the many other gaming events around the country, the Video Game Market is solely focused on buying and selling. Once gamers have spent up or wiped the venue clean of its many bargains, their next destination will most likely be back home – somewhere they can enjoy their many findings. While there will be several systems and arcade machines dotted around to offer some post-spending fun, our main aim is to ensure retro gamers know that there is an alternative to battling away on online auction sites.

What sort of specialist sellers will be there this year?
After the whirlwind success of last year's event, we've been inundated with bookings from retro gaming specialists all over the country. Fan favourites Console Passion are set to storm the event with shelves packed to the brim with classics. Elsewhere Retro Towers are due to return with a plethora of aftermarket gaming devices, Warp Zone are also due to bring along their unique and desirable custom consoles, and sellers such as Sore Thumb Retro Games are due to cater for the import only demographic. Games aside, we've also got a wealth of traders selling video game artwork and the adorable pixel bead sprite work, and the high-street superstore Forbidden Planet will be stopping by with lots of gaming merchandise.

Why do you think Video Game Market proved so popular?
Over the last few years we've seen an incredible rise in the value of retro games overall. With countless gamers feeling nostalgic, the supply is dwindling as the demand grows. As a result online auction sites have become a battlefield and car boot sales have become troublesome early morning hunts. The Video Game Market on the other hand guarantees gamers a vast selection at all kinds of prices, plus the added bonus of being surrounded by the growing community of pixel-addicts and collectors alike. Needless to say it's a day out many will find hard to refuse.

What's your advice to retro gamers planning to attend Video Game Market 2?
With just weeks to go until 7th February, it's time to get saving! Last year's event saw many favourites trading hands, along with various rarities and obscurities too. Be sure to take a look at the event's official website at www.events.retrocollect.com and decide upon which of our many confirmed traders you'll want to dash to first. *



» This range of must-haves looks like a great opportunity to fill the gaps in your SNES collection…

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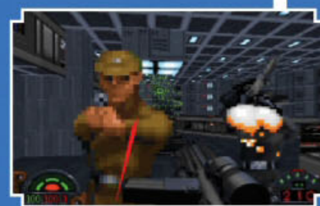
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Ahoy there mateys!

Our latest Bluffer's Guide celebrates the origins, death and subsequent rebirth of the point-and-click adventure



Star Wars: Dark Forces

■ As the popular FPS turns 20, we quiz the developers about its creations and the *Jedi Knight* games that followed



Hired Guns

■ We speak to the developers of the sci-fi alternative to *Dungeon Master*

Commando

■ Nigel Alderton reveals how he created his excellent Spectrum port of Capcom's hit run-and-gun in our fantastic new Ultimate Guide



Game Gear

■ As Sega's popular handheld turns 25, we take a look back at the system's beginnings and its impact on the games industry



And much more, including…

Chris Sawyer • Agent X • Dragon 32 • Super Bug • Sirius Software • Super Meat Boy • Trantor: The Last Stormtrooper • Top 25 ZX81 • Persona


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DIZZY: PRINCE OF THE YOLK FOLK

» Although Dizzy started off his adventures on 8-bit systems, we'd argue that the enhanced visuals of computers like the Amiga 500 made the series feel more like the cartoon that the Oliver twins had intended. So here's a far punchier version of Dizzy's fourth adventure, revealing just what happens after the plucky egg discovers his missing girlfriend Daisy



01

» Dizzy's stumpy legs makes traversing stairs a nightmare. Typically, Daisy's asleep in one of the highest spires meaning Dizzy is knackered by the time he reaches her. Still, he does his duty and kisses his beloved, who slowly wakes up.



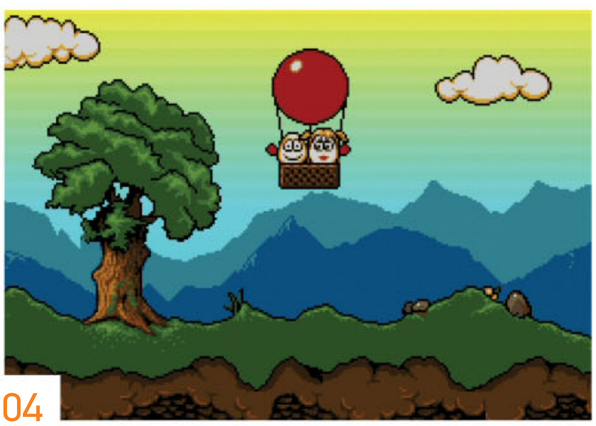
02

» "Oh Dizzy! You've saved me," exclaims Captain Obvious, as she awakens in front of her suitor. Dizzy has encountered trolls, dragons and an annoyingly wimpy lion, so he was hoping his entrance would have been met with a bit more enthusiasm.



03

» Daisy gleefully tells Dizzy that they can now get back to making Grand Dizzy's cherry pie, but the beleaguered egg wants none of it. He's completely shell-shocked after his hectic adventure and wants to sleep it off on that comfy looking bed.



04

» As Dizzy and Daisy fly off into the distance she berates him for taking his time in rescuing her, claiming that all the cherries he's collected will most likely have spoiled. Dizzy considers throwing Daisy overboard so he can head off on another eggshellent adventure, but decides to hatch another plan instead.



05

» As Daisy and Dizzy alight at Grand Dizzy's tree house, Dizzy tells Daisy that the old egg is allergic to cherries and that they need to find a suitable ingredient that won't kill him. A distressed Daisy sets off looking for a suitable selection of fruit fillings leaving Dizzy to have a well-earned rest.